

# Manufacturers Record

Reg. U. S. Pat. Office

## Industry Construction



BALTIMORE, MD.

JULY 21, 1932

## Less Cotton—Higher Prices in Prospect

The South is encouraged by the smaller cotton crop in prospect for this season. It means a chance for better prices for the staple produced and on hand.

With an estimated cotton acreage in cultivation July 1st of 37,290,000 acres, which is 3,899,000 acres or 9.5 per cent less than in cultivation on the same date last season, it will probably result in the smallest acreage harvested in nine years. The acreage in cultivation is 19 per cent less than in 1930 and nearly 24 per cent below the record of 48,730,000 acres planted in 1926.

In 1923 the South produced 10,139,000 bales on 37,123,000 acres. Cotton that year brought a price of 31 cents a pound, for it followed the short crops of the two previous years and there was no surplus acting as a price deterrent.

In many sections of the cotton belt boll weevil infestation is reported heavy, which is likely to cut production considerably. This, coupled with the decreased acreage and the fact that fertilizer consumption is less than half of that used in normal times, practically assures one of the smallest cotton crops in recent years, unless there is especially favorable growing weather from now until the end of the season.

While estimates of cotton production so early in the season are not reliable, a conservative forecast for the South's cotton crop of 1932 should approximate 10,000,000 bales. This small crop will bring more money to the South. It is the first time in several years that the cotton outlook has been as promising.

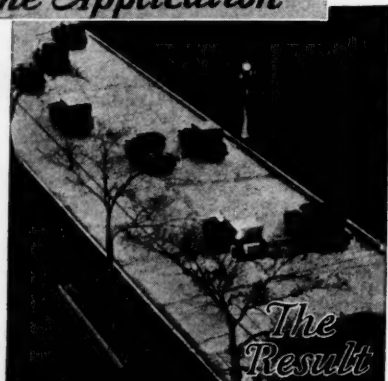
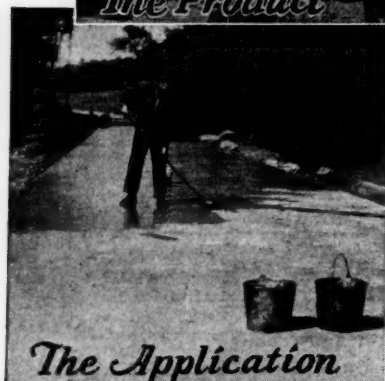
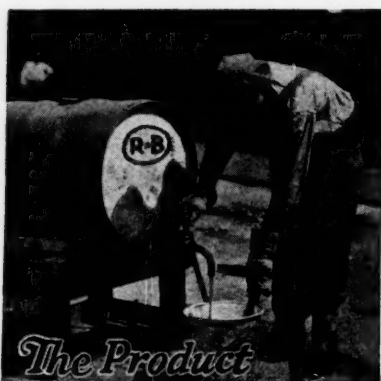
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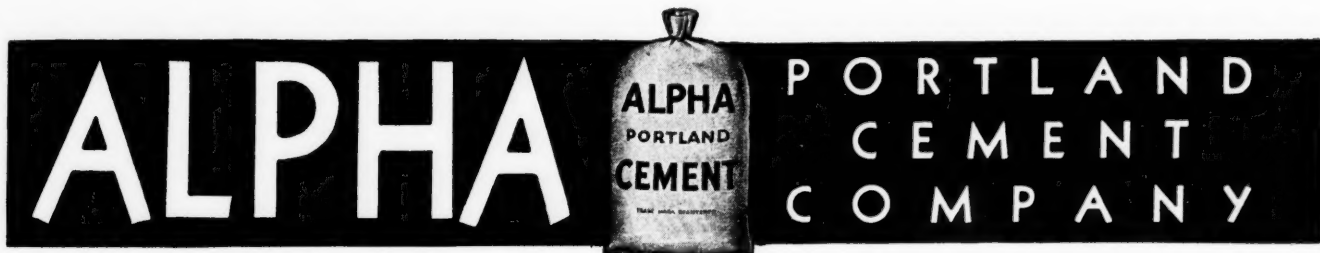
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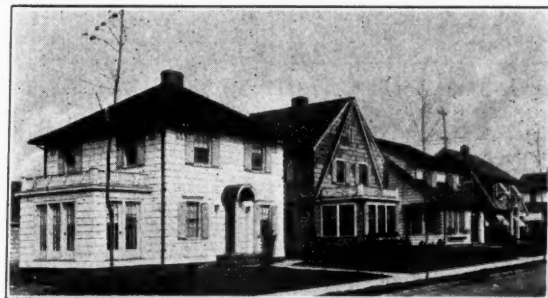
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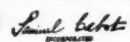
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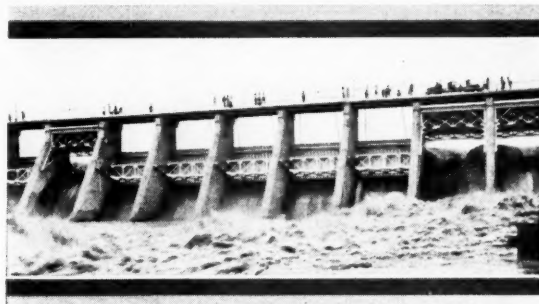
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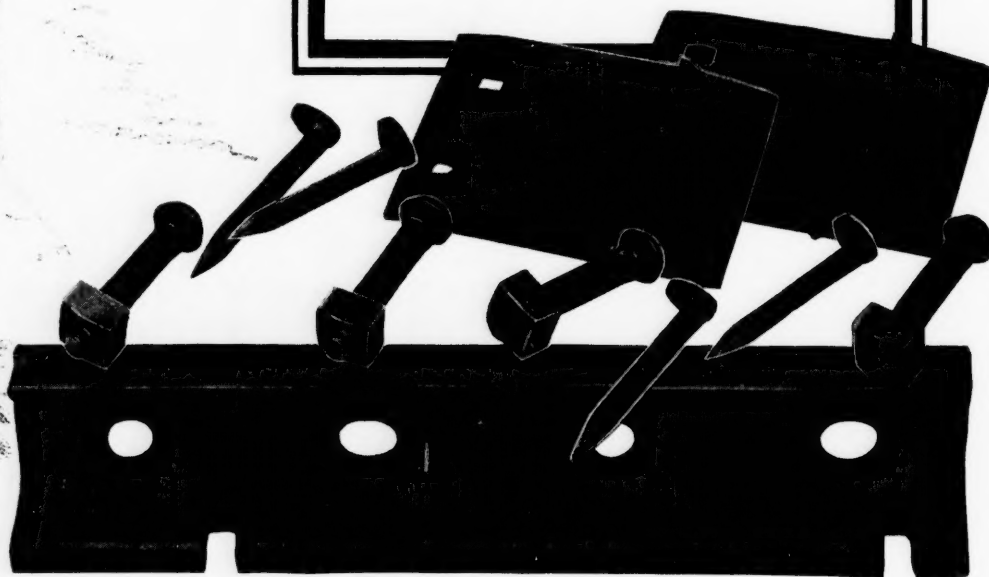
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## MANUFACTURERS RECORD

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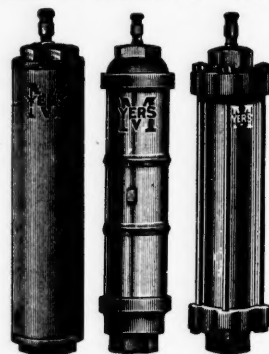
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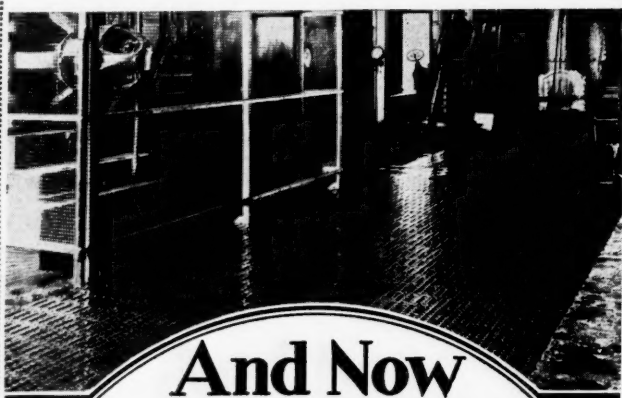
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# Manufacturers Record

Reg. U. S. Pat. Office

Devoted to the Upbuilding of the Nation Through the Development  
of the South and Southwest as the Nation's Greatest Material Asset

Vol. CI No. 29 }  
Weekly }

BALTIMORE, JULY 21, 1932

{ Single Copies, 20 Cents.  
{ \$6.50 a Year

## *An Announcement*

**W**ITH the fundamental changes taking place in the field of business, the MANUFACTURERS RECORD considers it timely to adopt certain plans which will broaden its work and increase its usefulness to subscribers. Its general articles and discussions of business trends will appear in a monthly publication hereafter, and its detailed construction items of new industries, marking the industrial progress of the South, will appear in a larger MANUFACTURERS RECORD DAILY CONSTRUCTION BULLETIN. This will be the only form in which this construction news service will be available. It will be possible in this way to interest a wider audience and give better service to the public.

The monthly publication will be the MANUFACTURERS RECORD in every respect as it has been for half a century, except it will be broader in the extent of its reading matter and greatly improved in typographical appearance. Its subscription price will be \$2.00 instead of \$6.50 per annum, and its aim will be, at this lower figure that can be charged for a monthly, to carry its message into every part of the country to an extent not possible with the weekly at its higher cost.

The MANUFACTURERS RECORD DAILY CONSTRUCTION BULLETIN, which for almost forty years has been recognized as an unequalled source of advance information about new enterprises, started in the 16 Southern states will become available to a wider circle of readers by reason of its price being reduced to \$10.00 per annum. No other business news service supplies such complete information covering so wide a territory even at a much higher cost. This information now becomes available every business day at a price very little more than the previous cost of \$6.50 for the MANUFACTURERS RECORD WEEKLY. The value of the DAILY CONSTRUCTION BULLETIN as an advertising medium will be at once apparent.

We are fully mindful of the fact that there has never been a time in this country's history when a proper interpretation of problems affecting the nation was more needed than now, and it will be our purpose to address ourselves to this work with the same thoughtfulness that has marked the career of this paper for fifty years. We approach the task with confidence in the future of the country and with confidence in our ability to render service more valuable than ever before.

There will be no diminution in our efforts to keep our readers informed upon the developing South, which we believe is equalled by no other section in its natural resources and in its opportunity for growth. That has been our life work and will continue to be.

There are many unfavorable things in the business atmosphere, but in our judgment the initiative and creative spirit of America will soon assert themselves to defeat depression and we say, with every feeling of assurance, that the march forward in the future, while on saner lines, will far exceed anything of the past. This country has been the marvel and envy of the world, and will continue to be.

## Reparations and War Debts

**P**RIME MINISTER MACDONALD expressed the thought in the minds of economists and business men as the obstacle to collecting the reparation bill against Germany. "You cannot," said he in effect, "lift billions of money out of a country that is not for the payment of goods, without demoralizing the economic life of that country and to an extent the whole world."

The present day face value of the Allies claims on Germany is around \$7,500,000,000 and they will accept \$715,000,000 in German bonds to be issued three years hence and not then unless Germany feels able to pay them. The settlement has been acclaimed as opening the way to business revival in all the countries of Europe, and the salutary effect of easing such an enormous load from any country will without doubt be felt around the world.

It is expected the Allies will ask us to reduce our claims and on that sentiment in this country diverges widely. Is it better to give up an admittedly doubtful asset which no one believes will ever be met in full, if at all, and thereby contribute to a freer interchange of commerce among all nations, ourselves included, or shall we stand firm for collection? It is true that money was loaned but without reparations what is the capacity of the debtors to pay? England said long ago she would rather have trade than reparations. Maybe she ought to have both, but things do not work out that way.

Money passing between countries usually is on the basis of goods exchanged, and while our money was loaned and our national budget will be unbalanced further if we cannot collect interest and principal as they come due, the thought persists that perhaps this great imponderable burden of debt that is causing the world, here and elsewhere, to bend and almost break under it, had better be eased.

Despite the obscurity of the moment concerning the "gentlemen's agreement" at Lausanne, certain facts stand out. Debts between nations have not been cancelled. They have been reduced to a one sum basis instead of being strung out over a period of 60 odd years. Whether or not ratification of the Lausanne plan by various governments depends on the United States scaling down what is due this country, it is well to consider if we would not be better off to have the debts paid promptly even on a greatly reduced basis of settlement than to wait for two generations with all the complications likely to ensue in the meanwhile before we collect.

## Depression World-Wide

**T**HE United States is not the only country experiencing curtailment of trade and industry, with exports at the lowest point in years. A correspondent in Paris writes that Russian dumping is ruining the lumber trade and grain trade over the whole of Europe. Shipping is at a stand-still. The deficit in French exports since January is 8,000,000,000 francs.

## Price Trends in Steel

**A** RECENT analysis of steel prices and wages by the National Association of Flat Rolled Steel Manufacturers affords encouragement for the belief that business is ready for an upturn in the price level. It is pointed out that steel prices were the barometer by which the 1929 depression might have been foretold and may be the indicator which will first mark its end and the beginning of an upward movement.

The Statistical Bureau of the Association has charted price trends of various commodities over a term of years. Comparing all-commodity prices with the composite steel prices from the 1920 post-war peak to the present, it is shown that the steel industry has been excessively deflated. The price of all-commodities has declined 45.5 per cent in the last 12 years. In the same period, the average price of steel dropped 54.9 per cent, or 9.4 points lower than the average.

Following the deflation of 1920 commodity prices started upward in the middle of 1921, but it was not until the middle of 1922 that steel started its rise. However, in 1923 steel began to steadily decrease in price while commodity prices either maintained their level or increased until the break of 1929. Not only did steel start its deflation six years ahead of other commodities but it is now nearly 5 points lower than the all-commodity level of the present. The average price of steel has declined 33.7 per cent since 1923 as contrasted with a decline of 28.8 per cent by all commodities during that period.

Another interesting study is presented of the trend of average hourly wages in the steel industry as compared with all industries. It shows that in 1923 when steel prices started their sharp decline, wage rates in the steel industry started a sharp rise. From that time until the middle of 1930 steel wages were on a higher level than the average wages for all industries, with steel prices declining all the time. This explains why the average wage in all industries dropped only 16.1 per cent while steel wages dropped 29.5 per cent.

On the basis of the statistics presented it is evident that steel prices cannot be continued at the prevailing level without causing serious embarrassment to the steel industry. It is, therefore, reasonable to expect that for self-preservation the steel industry will be compelled to strengthen its price structure.

## Profit From Improved Roads

**P**UBLIC money expended for improved highways represents a capital investment that is "self liquidating." It is a productive expenditure in the final analysis. The building of good roads has been one of the nation's greatest investments, and a profitable one. These facts were emphasized recently by T. H. Cutler, president of the American Road Builders Association, who shows that profits from improved highways are based on savings in transportation costs to the American people; on savings and increased com-



fort and convenience that more than equal the cost of such public construction.

The profits from 700,000 miles of improved roads in the United States have been estimated as high as \$2,000,000,000 annually. They represent the savings over what transportation would have cost over unimproved roads and streets. In addition our modern highways have been responsible largely for the great development of the motor vehicle industry and other industries that are dependent upon the automobile for their existence.

The additional value of social contacts, educational and recreational advantages that the motor vehicle and good roads make possible are beyond estimation in dollars.

## Broadening Knowledge About the South

**I**N this readjustment period the South has its greatest opportunity. To facilitate its development it needs to make its resources and possibilities better known. The broader the conception of those within the South as to its advantages and the progress the whole section is making, and the wider this information is disseminated outside of the South, the quicker will its opportunities be turned into realities. This is the underlying purpose of the 1932 edition of the Blue Book of Southern Progress just issued. That it is performing its mission to broaden knowledge about the South is attested by the commendatory letters and editorials which have been received in the last few days. We would like to publish every one. Limited space prevents this, but in the following extracts are quoted a few comments to show the appreciation and interest manifest in the facts presented.

### Mackey Wells, President, Kerner Incinerator Co., Milwaukee:

"I started to page through it with the idea of putting it down for other more important matters, but it is so well done that I spent a full hour on my first reading of it, and I shall most certainly put it aside for future reference.

"The information is extremely well presented, and the facts are both interesting and astonishing. I have a very much better conception of the importance of the South than I have ever had before through just one hour's perusal of your Blue Book."

### Robert Clarke, Jr., Pittsburgh-Des Moines Steel Company, Pittsburgh:

"We shall keep this eyeopener of the South's rapid advance as a compact, well-arranged reference work. We have found previous issues of the Blue Book invaluable in presenting clearly and concisely the true story of the South's giant strides in agriculture, mining and manufacturing."

### W. D. Tynes, Hardie-Tynes Manufacturing Company, Birmingham:

"I have not had much more than time to glance through the book, but as far as I have gone it looks to me as possibly the best one that you have so far produced."

### C. P. Denslow, National Meter Co., New York City:

"We have examined the publication with some attention and congratulate you on having produced an extremely interesting and important analysis of the conditions and resources of one of the most promising sections of our great country. It is a valuable book of reference."

### Beeman Fisher, Texas Power & Light Co., Dallas:

"I feel that the Blue Book gains in value each time a new edition is published."

### Edward E. Barrett, President, Roberts & Schaefer Co., engineers and contractors, Chicago:

"This is a fine reference work and will be preserved in our library."

### E. G. Johnson, Homestead Valve Manufacturing Company, Coreopolis, Pa.:

"From our preliminary study of the facts given in the Blue Book, it looks as though it will be quite valuable in helping to consider the comparative sizes of markets in the South."

The chief editorial writer of one of the South's leading dailies, in mentioning the fact that "the MANUFACTURERS RECORD is part of my regular reading," says:

"I depend much on the Blue Book in my work: finding it invaluable for statistics that are particularly desirable, and always reliable."

The editor of a small town paper in the central South in a personal note calling attention to a lengthy editorial he had written for his paper, in which he had highly commended the 1932 edition of the Blue Book of Southern Progress as indispensable to business men and as a reference book of facts, asks us to "please never take us off your mailing list."

The Anniston, Alabama, Star concludes an editorial, headed "A Guide to Our Southern Resources and Activities," with these words:

"We do not admire the professional Southerner, with his affected manner and enthusiasm, and his braggadocio, but a thorough and correct knowledge of the South is essential to progress and everyone should have such important facts as these available."

The Houston, Texas, Post, editorially announces the "1932 Blue Book" in the following manner:

"The 1932 edition of the Blue Book of Southern Progress, published by the MANUFACTURERS RECORD, is quite up to its usual standard in respect to variety, comprehensiveness and accurateness in presenting information on industrial and business activity in the South during the past year, and statistics on the manifold resources of this great section of America.

"The publication is welcomed especially by the business and industrial world this year because of the optimistic note sounded in it. The South is recovering from the depression, the surveys of the several fields of activity show. The amount of progress actually shown perhaps will be a revelation to many who have imagined that everything was at a standstill."

Says the Arkansas Democrat in its leading editorial of July 10:

"If your pessimistic friends contend that the South has suffered as greatly from the depression as have the northern and eastern sections of the country, cite them to these facts in the 1932 Blue Book of Southern Progress."

The Asheville Citizen-Times writes:

"The new Blue Book of the MANUFACTURERS RECORD is more than a mine of information about the South. It sets forth a record of achievement that should prove an inspiration to the people of this section. Concrete evidence bears out this generalization. No other section has stood up so well industrially during the past year."

# \$4,000,000 University of Texas Building Program

**A** BUILDING program involving the expenditure of more than \$4,000,000 is being carried out by the University of Texas, at Austin. It embraces a total of nine buildings all of which are being erected simultaneously on the campus of the institution, and in addition there is being erected a memorial gateway at the south entrance of the original 40-acre campus, made possible by a gift of \$250,000 to the University by the late Major George W. Littlefield of Austin.

Buildings are all of the Spanish renaissance type of architecture. Plans for seven of them which are to be devoted to class rooms, offices and laboratories, were prepared by Herbert M. Greene, LaRoche & Dahl of Dallas, University architects, with Paul P. Cret of Philadelphia, Pa., consulting architect, and R. L. White, University resident supervising architect. The remaining two buildings — the Student Union Building and Auditorium — were designed by Mr. White, and a portion of the funds to erect these two structures were contributed by former students and others.

Plans were passed upon by the Board of Regents of the University, building committee of the faculty, and by President H. Y. Benedict. General contract for the Engineering Building was awarded by the Board of Regents to the Bellows-MacLay Construction Company, Dallas, at \$268,750. This building will have a 3-story central unit with a 2-story wing on one end and a 1-story wing on the other. The central section will be of concrete and wings of steel frame construction, faced with brick on a granite base, and trimmed with limestone.

General contract for the library, union and physics buildings was awarded to P. O'Brien Montgomery, Dallas, on a combination bid, that for the library being \$598,663, union building \$277,393, and physics building \$291,401. The library will be four stories and basement, including mezzanine, with an exterior of limestone and terra cotta and concrete corners. Stack tiers will be installed in the north central section of the structure. Two elevators will be installed—

one for book deliveries and the other for passengers. A conditioned-air circulating system will supply the stack room. The student union building will be L-shaped, 250 by 175 feet, 4 stories including basement, the top story to be in the nature of a tower to balance a tower on the architecture building. It will be of steel and concrete, trimmed in Randon-Ashler stone, with terra cotta ornamentation. Space will be provided for a cafeteria, ballroom, headquarters for former students and rooms for student activities. The physics building will be 5 stories including basement and sub-basement. Base of the first story will be of stone and the first three stories will be faced with brick. An elevator will be installed and on the roof there will be a small, modernly equipped observatory.

Contract for a geology building and men's dormitory was awarded to the Christy-Dolph Construction Company, Dallas, on a combination bid of \$209,500 for the former and \$121,900 for the latter. The geology building will be four stories and attic, the first two stories to be of limestone and the upper two of faced brick. Terra cotta trimmings will be used. The structure will contain an auditorium framed in structural steel. The men's dormitory will consist of two wings, one of three stories and the other of four stories, the latter to be surmounted by a one-story tower. The entire building, except the tower, will be faced with brick, while the latter will be of Randon-Ashler stone. Each wing will be a distinct section with no communication between them, and on each of the three floors sleeping porches will be built.

General contracts for the home economics building and architecture building were awarded to Robert E. McKee, El Paso, at \$224,746 for the former and \$227,297 for the latter. The home economics building will be four stories and basement, faced with Randon-Ashler stone and trimmed in cut limestone. It will contain 50,000 square feet of floor space and will be equipped with an elevator. The same amount of floor space will be provided by the architecture building, which will be three stories with a one-story tower. A feature of

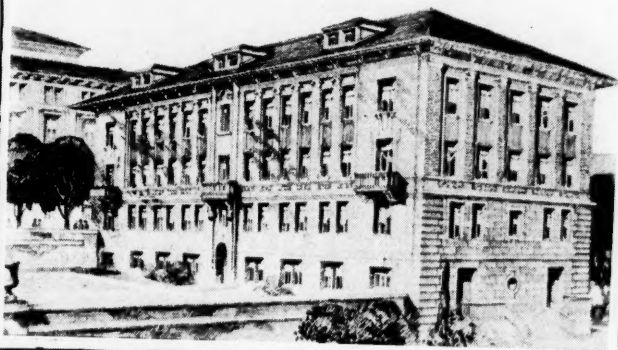
this structure will be a central patio. Exterior wall facing will be of Randon-Ashler stone, with cut limestone trimmings and exposed concrete cornices. An elevator will be installed.

Contract for the auditorium was awarded to Landis & Young, Bloomington, Ind., on a bid of \$148,051. This building will be of structural steel frame work above the first floor level and will require 300 tons of material. It will be faced with Randon-Ashler stone and will have all stone corners. An air conditioning system will be installed and seating provided for 1300 people. Contract for building the structural work of the memorial gateway was awarded to J. F. Johnson, Austin, on a bid of \$118,600. As a part of this project, a stone wall will be built part way across the campus, contract for the wall having been awarded to J. J. Wattinger, Austin, at \$37,600. Heroic and allegoric figures for the gateway were designed by Pompeo Coppini.

Heating contract for all nine buildings was awarded to Young & Pratt, Lubbock, on a combined bid of \$309,500. Plumbing contracts were awarded as follows: Engineering building, J. C. Koriath Plumbing Company, Sherman, \$26,200; library, Young & Pratt, Lubbock, \$20,325; home economics building, \$18,685; architecture building, \$10,681, and geology building, \$13,746. Hill Brothers & Company, Waco; physics building, S. P. Osburn, Fort Worth, \$19,189.30; men's dormitory, David Vickers Company, Sweetwater, \$17,825; student union building, Ed. B. Hudson Co., Inc., San Antonio, \$18,053; auditorium, Jud & Ormond, San Antonio, \$4782.

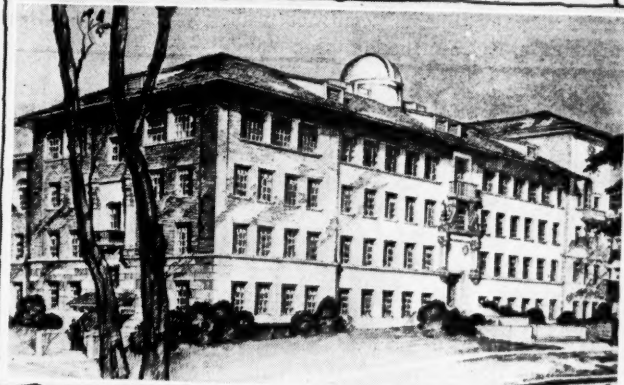
Electric contracts were awarded as follows: Auditorium, Martin Wright Electric Company, San Antonio, \$20,485; student union building, Eugene Ashe Electric Company, Fort Worth, \$25,500; architecture building, Wright Brothers Electric Company, San Antonio, \$18,627; library, J. E. Morgan & Sons, El Paso, \$53,623; engineering building and men's dormitory, combination bid, Graham & Collins Electric Company, San Antonio, engineering, \$36,829, dormitory, \$10,720; home economics building and geology building, combination bid, Graham &





GEOLOGY

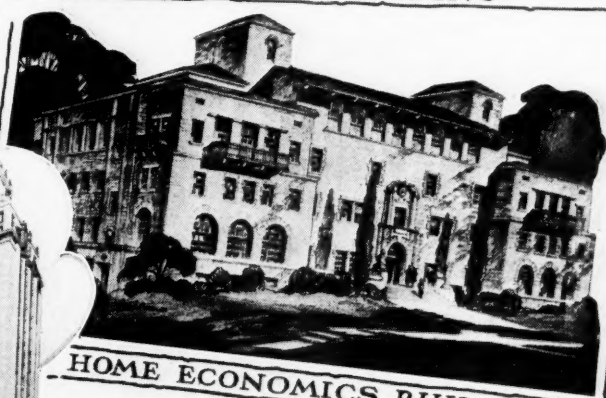
BLDG.



PHYSICS BUILDING



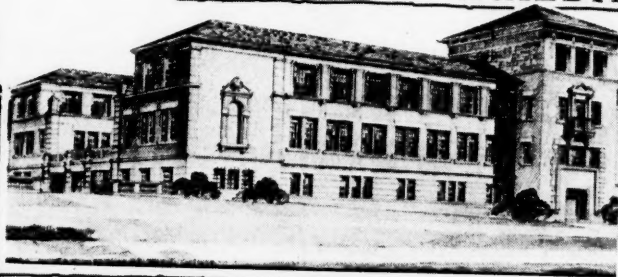
MENS DORMITORY BLDG



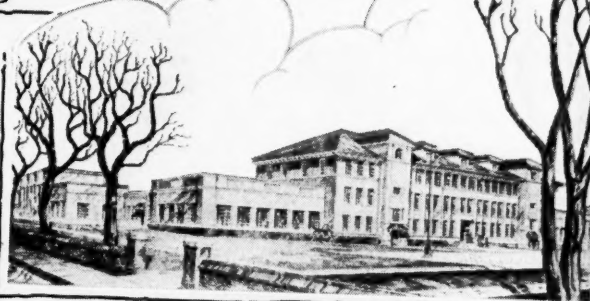
HOME ECONOMICS BUILDING



LIBRARY BUILDING



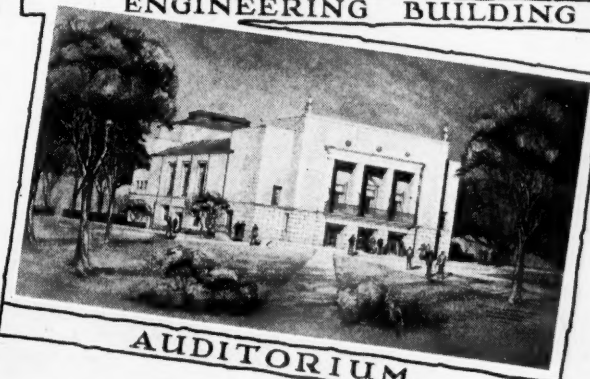
ARCHITECTURE BUILDING



ENGINEERING BUILDING



STUDENTS UNION BLDG.



AUDITORIUM



Collins Electric Co., home economics, \$24,278, geology, \$23,175.

Laboratory equipment contract was awarded to Kewaunee Manufacturing Company, Kewaunee, Wis., as follows: Engineering building, \$12,511.91; home economics building, \$15,445.38; geology building, \$25,715.12; physics building, \$30,752.96.

Contract for steel book stacks for the library was awarded Sneed & Company, Jersey City, N. J., at \$177,064.

Among more important sub-contracts awarded in connection with the project are the following:

**Structural steel**—Austin Bros., Dallas; Orange Car & Steel Co., Orange, Tex.; Central Texas Iron Works, Waco, Tex.; Dallas branch Virginia Bridge & Iron Co., Roanoke

**Miscellaneous and ornamental iron**—Anderson Iron Works, Fort Worth; Decatur Iron & Steel Co., Decatur, Ill.; Weaver Ornamental Iron Works, Dallas  
**Millwork**—Stevens Sash & Door Co., San Antonio; Enochs Lumber & Manufacturing Co., Jackson, Miss.

**Glass and glazing**—Binswanger & Co., Houston

**Reinforcing steel**—Heierman Tips Co., Austin; Houston branch of Concrete Engineering Co., Omaha, Neb.

**Concrete**—Transit Mix Concrete Co., Houston

**Cut stone**—Texas Quarries, Inc., Austin.

**Granite**—Henry Meyer, San Antonio; T. W. Norton, Llano, Tex.; A. Stasswender, Austin; Llano Granite Works, Llano; C. F. Roehl, Fort Worth

**Roofing and sheet metal**—C. H. Ruebeck, Waco; Buas & Sons, Austin; Parker Roofing Co., San Antonio

**Metal windows**—Hope's Windows, Inc., Dallas

**Metal doors and frames**—Anderson Iron Works, Fort Worth

**Terra cotta**—Winkle Terra Cotta Co., St. Louis, Mo.; Northwestern Terra Cotta Co., Denver

**Face brick**—Elgin Butler Brick Co., Austin; Elgin Standard Brick Co., Elgin, Tex.

**Face brick and hollow tile**—Acme Brick Co., Fort Worth

**Hollow metal doors, tin clad doors, kalamain doors and access doors**—R. J. Dewees Co., Dallas

**Tile and terrazzo**—International Tile Co., Houston

**Vault doors**—Herring-Hall-Marvin Safe Co., Hamilton, Ohio

**Plastering**—J. L. Duffin, San Antonio; H. C. Wilson, Inc., Dallas

**Projection screens, etc.**—Andel & Co., Chicago

**Tile**—James M. Thompson Co., Fort Worth

**Leuders stone**—Texas Cut Stone Co., Dallas

**Terrazzo**—Venice Art Marble Co., San Antonio

**Asphalt tile**—Sales Service Co., San Antonio

**Marble and slate**—J. C. Bruggen, Dallas

**Stone**—Watterson Bros., Austin

**Screens**—Higgins Manufacturing Co., Newport, Ky.

**Common brick, etc.**—Butter Brick Co., Austin

**Metal lockers**—Dallas branch of Berger Manufacturing Co., Canton, Ohio

**Elevators**—Otis Elevator Co., Dallas

**Incinerator**—Kerner Incinerator Co., Milwaukee, Wis.

**Weatherstripping**—Ceco Weatherstrip & Screen Co., Dallas

**Wood floors**—Perfection Oak Flooring Co., Inc., Shreveport, La.; Calcasieu Lumber Co., Austin

**Medicine cabinets**—Corcoran Manufacturing Co., Cincinnati, Ohio

**Magnolia cement**—Kuntz-Sternberg Lumber Co., Austin

**Blackboards**—Walcott & Maisey Co., Houston

**Waterproofing**—A. B. Bowles, Houston; A. C. Horn, Houston

**Gypsum roof**—General Supply Co., San Antonio

**Expanded metal base reinforcing**—Blue Diamond Co., Dallas

**Composition floors**—Turner Resilient Floors, Inc., San Antonio

**Steel sash**—Federal Steel Sash Co., Waukesha, Wis.

**Composition tile, etc.**—Thos. Moulding Floor Co., Dallas.

## Industries Enlarge Production Schedules

Evidences of increased industrial activities in a diversity of industries, particularly small, independent concerns, in the states from Maryland to Texas, are not lacking. New plants are being placed in operation, established factories are going forward with improvement programs calling for the installation of new machinery and equipment, and various new enterprises are under way or projected. Enlarged production schedules have been adopted recently by numerous companies upon receipt of substantial orders. Presented herewith, as indicative of the movement under way, are items of interest relative to projects chosen at random.

The Wheeling Steel Corporation recently increased operations at its Riverside plant to a point nearer capacity than it has been any time this year, thereby providing work for 400 men.

Samuel F. Troxell Co., Louisville, recently completed one of the largest roofing contracts ever to be awarded in the South. The contract called for covering the huge tobacco storage warehouse of the American Suppliers, Incorporated, with Barrett 20-year bonded built-up, felt, pitch and gravel roof. It required the labor of 35 men for a total of 43 days to apply the roofing on the warehouse, the surface totalling 398,000 sq. ft.

The Columbia Marble Company expects to complete its new plant at Marble, N. C., by August 10. The company quarries, finishes and sells marble for building and monumental purposes. With quarries in Alabama, Tennessee, Georgia and North Carolina, it is one of the largest producers of marble and marble products in the country.

The Fiber Craft Company, Columbia, S. C., recently received an order for five carloads of overstuffed furniture. The order is a result of an exhibition of specimen furniture displayed at the Chicago Furniture Market.

The Hazel-Atlas Glass Co., Clarksburg, W. Va., as a result of the widespread movement to prepare fruit and vegetables for the winter, has been forced to operate two tanks on Sundays in order to fill orders. Not since 1921 has it been necessary to operate two tanks on the Sabbath.

The Big Jack Company, manufacturers of overalls, Bristol, Va.-Tenn., has opened its third plant, providing employment initially for 125 persons, the number to be increased to 300 as fast as operatives can be trained.

The Frigidaire Corporation, Dayton, Ohio, which recently received a large order for watercoolers for the barracks, office buildings and shops at the Norfolk Navy Yard, manufactured sometime ago its 2,500,000th Frigidaire. The company has been manufacturing electric refrigerators for 16 years.

The Piedmont Wood Preserving Co. has put into operation a new unit at its Augusta, Ga., plant, devoted entirely to

the creosote treatment of Southern forest products. The original unit is devoted to the zinc-meta-arsenite process. The company's capacity will be practically doubled.

The Goodyear Clearwater Mill at Rockmart, Ga., resumed full time operation July 11. The mill produces fabrics for tires. The mill has been running 32 hours weekly and the new schedule calls for 45 hours a week.

The United States Stamping Company will shortly resume full time operations in its enamel works at Moundsville, W. Va., according to an announcement by F. S. Earnshaw, plant manager. "Business is much better, and I believe the move is justified," said Mr. Earnshaw.

The Falbfliesch Company of Erie, Pa., will shortly begin operating a new resin refinery at Valdosta, Ga., to prepare resin for use in sizing paper. Employment will be provided for 50 persons, and a large quantity of raw material produced in South Georgia will be consumed.

The Miller Brothers CompanyFlooring plant at Johnson City, Tenn., which has been closed for several weeks, reopened this week, providing employment for from 125 to 140 former workers. The plant is being reopened for an indefinite period, officials said, and only former employees will be given work.

Plans have been announced by the New Industries Committee of the Anniston Chamber of Commerce for the establishment of a hosiery mill in Anniston, Ala., by a new company to be known as the Coosa Textile Company, of which Andrew Stoltz is proprietor and manager. About 30 new seamless hosiery machines will be installed, and a dyeing and finishing department provided.

Contract has been awarded to the Gallivan Construction Company, Greenville, S. C., for building a 3-story warehouse and office building here for the Southern Bleachery, Inc., and the Piedmont Print Works at Taylors, S. C.

Character Products Co., Salisbury, N. C., is operating on a full time basis with 150 persons at work. Further expansion is planned, it is reported.

## Gas-Electric Motor Trains

Motor trains made up of gas-electric motor cars with trailers are in service on the Texas Central branch of the Missouri-Kansas-Texas lines between Waco and Stamford. The new equipment was built by the St. Louis Car Co. at its St. Charles, Mo., plant, representing an investment of about \$60,000 per car. The decision to use such equipment is based on a two-fold purpose, according to an announcement by President M. H. Cahill. First, it is hoped that the additional room and comfort provided will prove generally more attractive than that afforded in the usual day coach, so that passengers will choose this means of transportation in preference to bus travel. Second, the use of the gas-electric equipment will effect operating economies.

Each motor car is powered by a 400-horsepower gasoline engine which generates electric power for locomotion. The motor cars, each have three compartments—the cab where the engine is located, a mail room with a capacity of 5000 pounds, and a baggage room with a capacity of 35,000 pounds. Each motor car pulls a 75-ton trailer car which is divided into four compartments, two for men and two for women, providing a total seating capacity of 72. Wider spacing of seats than in the ordinary railway coach is an outstanding feature of these cars. In an effort to provide a greater degree of comfort, 40 inches, instead of 34 inches, of seating space has been provided.

One of the improved passenger coach trailers is equipped with Fafnir-Melcher roller bearings which operate in oil in a journal box designed to be dirt and dust proof. This is said to be the first car so equipped to operate in the territory south of St. Louis. Experiment shows, it is said, that the roller bearings so reduce friction that if the car is given a slight start to overcome inertia as few as six girls could continue to push it.

It was brought out at the Thirteenth Annual Convention of the Mechanical Division of the American Railway Association held recently at Chicago, that high speed rail motor cars may be the means of winning passenger business for steam railroads.

"By the creation," according to the report submitted by the Committee on Automotive Rolling Stock, of a special high speed type of rail motor car, there should be some very attractive fields of application where traffic could be stimulated and built up to profitable amounts. Certainly, really high speed operation of comfortable, clean cars, free from the annoyance and discomfort of smoke and cinders should make a favorable appeal for patronage and should offer strong competition to both buses and airplanes."

Due to the decline in passenger travel in recent years necessitating a reduction in operating expenses particularly over branch lines and elsewhere, where traffic is light, there has been a marked increase in the use of rail motor cars. Since January 1, 1932, according to the report, 64 railroads in the United States and Canada have placed in service 769 rail motor cars. Eight years ago the average horsepower was 97.5 but this has gradually increased until today the average is 508 horsepower, while one unit now being built will develop 900 horsepower. Originally single motor rail cars were used but with the increase in power, numerous roads are now operating trains consisting of a motor rail car and four trailers. By the use of these cars, the railroads are able to give good service in places where the cost of operating steam trains would not be warranted.

The railroads are also making a study as to the practicability of using rubber-tired wheels on rail cars and also what can be done through the increased use of aluminum and similar metals to reduce the weight of passenger cars.



Gas-Electric Car Operating Between Waco and Stamford, Tex.

## \$4,500,000 COURTHOUSE

Jackson County Takes Steps to Begin Construction at Kansas City, Mo.

Kansas City, Mo.—Borings for bedrock footings for Jackson County's new \$4,500,000 courthouse to be erected here will probably be started in September, it is announced, following the signing of contracts by the County Court and the architects. The building will be erected on the block south of Twelfth street, between Oak and Locust streets, after plans by Keene & Simpson, Wight & Wight and Fred C. Gunn & Co., all of Kansas City, and Edward F. Neild, Shreveport, La. Mr. Neild will be employed in the capacity of consulting architect, while Mr. Gunn will be a member of the architectural board handling the project and will serve as superintendent of construction.

Construction of the building is expected to be started before the winter, it is announced, although the ability of the County Court to sell bonds will determine to some extent the date of beginning construction.

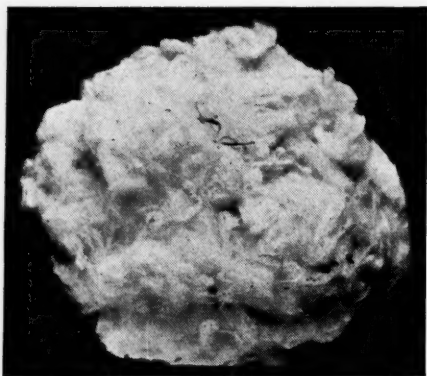
This project is embraced in Kansas City's Ten-Year Plan, for which more than \$30,000,000 of bonds were voted, including \$4,500,000 for a courthouse. Bonds in the amount of \$1,200,000 were recently sold by the County Court, \$1,000,000 of which will be used for purchasing the courthouse site, while the remaining \$200,000 will be used to remodel the courthouse at Independence, Mo.

## \$150,000 COAL YARD

Plans have been made by the Pennsylvania Railroad to establish a \$150,000 coal handling yard in Baltimore at the Bolton Street station and work is expected to begin within a few days. These facilities are a part of the Pennsylvania's \$22,500,000 improvement program for Baltimore undertaken some time ago and on which considerable construction has been accomplished. The work will involve the re-arrangement of tracks in a portion of the Bolton yards, it is announced, and the replacement of present coal handling equipment with the most modern machinery, including silos, open storage bins and ground storage bins. There will be 8 silos of 4200 tons capacity each. Construction contract has been awarded to the M. A. Long Company, Baltimore, and it is understood the new coal terminal will be ready for operation by the fall. W. B. Wood, engineer in charge of the Baltimore improvements for the Pennsylvania, is handling the project.



# Cotton Drying Experiments



Lint from damp and green seed-cotton ginned in the usual manner without drying

**A**LTHOUGH a few driers have been installed in the Delta regions of Mississippi prior to the cotton ginning season of 1931-32, there was at that time an increased interest in cotton drying, and a number of the more progressive ginners made installations during that season. Both homemade driers of the Government designs and various commercial driers were used. Approximately 20,000 bales of staple and long staple cottons are reported to have been dried artificially in the State of Mississippi between October, 1931, and March, 1932.

The driers developed by the Bureau of Agricultural Engineering of the United States Department of Agriculture are not furnished by the Government, but are built from free plans based on public patents issued to the Department of Agriculture. These designs are suitable for home construction, but factory built driers are generally more efficient and neater in appearance. Several well-known manufacturers of cotton ginning machinery have been offering all-steel factory-built driers of Government design. In addition to these which are principally vertical driers, several excellent commercial units of horizontal type are being installed by manufacturers.

A satisfactory process for drying seed-cotton with heated air was developed by the Bureau of Agricultural Engineering, and is generally known as the "Government Process." It is a safe and dependable method, adaptable to all of the existing types of driers, either commercial or Government designs. This process comprises the following basic requirements:

(1) An adequate volume of heated air

By

CHAS. A. BENNETT

Bureau of Agricultural Engineering  
United States Department of Agriculture

is required, from 40 to 100 cubic feet for each pound of damp seed-cotton.

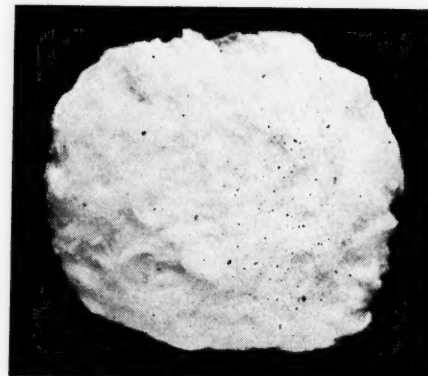
(2) The seed-cotton is exposed to the blast of heated air in the drying cabinet for a period of 30 seconds to 3 minutes, depending upon the kind of drier and the condition of the cotton.

(3) A safe temperature of the drying blast must be maintained; from 160° to 200° F. is recommended for most cottons.

Reports from many ginners who have used driers during the past year, as well as the experimental data obtained from approximately 3000 drying tests, indicate that during the first part of the season, 185° F. is a very satisfactory temperature, and 200° F. a desirable safe limit. Study of the effects of artificial drying indicate that the maximum safe temperature is lower for early cottons than for late rain-soaked cottons, which have been subjected to drying temperatures as high as 225° F. without injury. When temperatures higher than 225° F. have been used, there have been many complaints that the staple was shortened or that its strength was impaired, or both. Experience with cotton driers and acquaintance with their operation makes evident, however, that the cause of these complaints has been principally the injudicious use of high temperatures.

Seed-cotton driers used in accordance with Government Process have uniformly improved the ginning, these improvements being evidenced by (1) smoother ginning, resulting in a smoother sample and better "preparation"; (2) increased capacity or outturn per hour; (3) ability to gin successfully under adverse weather conditions and when the seed-cotton is damp; (4) elimination of chokages, breakages, and shut-downs, and a decrease in power requirements. The dried seed-cotton usually produces a softer seed-roll and eliminates many handling troubles associated with damp cotton.

The quality of the ginned lint general-



Lint from damp and green cotton ginned after passing through mechanical drier

ly is said to be improved by the drying process.\*

Cotton drying installations at commercial ginneries have varied in cost from \$1000 to \$7000 and operating costs have ranged from 35 cents to 90 cents per bale. Improvements in the grade and preparation of dried cotton have increased the net price of the cotton from 60 cents to \$5 and more per bale. As the use of driers increases and as their operation becomes more familiar to the ginners, improved uniformity in results and fewer complaints should be expected.

Various combinations of storing, sun-curing, etc., with and without artificial drying, were tested last year. It was found that damp cotton which had been sun-cured and then artificially dried could be ginned very satisfactorily but did not produce a smoother product than when sun-cured alone. On the other hand, there appeared to be no significant difference in the quality of the product, so far as marketability was concerned, between the ginned lint direct from sun curing and the ginned lint direct from artificial drying without sun-curing.

It has been known for years that when seed-cotton is properly cured by long storage it will usually be in good condition for ginning. However, long storage involves additional costs for buildings, extra handling and other items, hence may be unprofitable. Experiments indicate that the period of storing must be for more than two months, because cotton stored for a shorter period did not appear to have reached a stable condition.

\*See article by F. L. Gerdes, Cotton Technologist, Cotton Ginning Investigations, Stoneville, Miss., in Yearbook of Agriculture, 1932.



### American Net and Twine Unit

Anniston, Ala.—Complete plans for an addition to the plant of the American Net & Twine Company here are expected to be available the first of August, at which time construction will start, according to A. K. Adams & Company, Atlanta, general contractors. Work will cover a second story addition to No. 1 mill, about 107 by 80 feet, with the use of steel floor beams and wood roof timbers, intermediate and maple floor, and tar and gravel roof. A toilet tower will be provided with five fixtures, metal toilet partitions and tile floors. Wall construction will be of brick, with either wood windows or steel sash, while extensions will be made to the heating, plumbing, sprinkler and electric systems. There will also be a one-story addition to the dye house, about 53 by 85 feet, with brick wall, wood trusses, tar and

gravel roof, monitor full length, wood sash and concrete floors.

### Prosperity in South Reported by National Official of Grocers

"The South has more prosperity than any other part of the country," Chas. H. Jansen, executive secretary of the National Grocers' Association, of St. Paul, Minn., speaking before the Charlotte Retail Grocers' Association recently. "Down here," he said, "construction work is going on, nature is abundant, grocers are collecting their bills and the people are happy and contented."

"If there is anyone who can put his finger on the pulse of prosperity, it is the retail grocer and I have been in constant contact with them in every part of the country."

### \$2,984,000 UNIVERSITY

#### BUILDINGS COMPLETED

Four Structures at Louisiana Institute  
Ready for Occupancy

Baton Rouge, La.—Four new buildings completed for Louisiana State University—three on the university campus here and the fourth on the grounds of Charity Hospital in New Orleans—were erected and furnished at a cost of \$2,984,302, according to Dr. James M. Smith, president. The Baton Rouge buildings include the Huey P. Long field house, costing \$476,608; women's dormitory, \$522,778, and music and dramatic arts building, \$748,764. The cost of the medical building in New Orleans was \$1,236,151. The aggregate amount of general contracts for the four buildings was \$1,353,586, and architects' fees, \$216,533.

## Bridge for Pipe Lines

THE construction of pipe lines for transporting natural gas, oil and gasoline, from the Southwest to distant industrial centers involves the solution of many engineering problems; also, other almost insurmountable obstacles must be overcome. It is the aim of the engineers to build such lines over as direct a right-of-way as is practicable. Therefore, the lines are laid under treacherous rivers, through deep swamps, up steep mountainsides and across deserts. Each type of natural barrier presents its own peculiar and special difficulty.

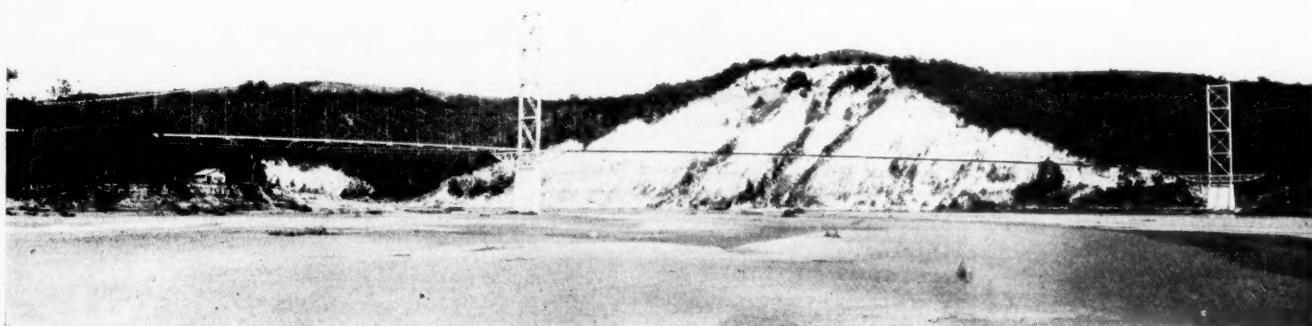
The pipe lines are carried also on overhead bridges, one of which is here illustrated. It is a suspension structure,

over the Red River between Oklahoma and Texas, about 15 miles north of Gainesville, Texas. The bridge supports two 16-inch gas lines of the Lone Star Gas Company's system, coming down from the Oklahoma fields. Two main cables, each one-third of a mile long and weighing 16,000 pounds, are used on the bridge, besides two so-called wind cables running the full length of the bridge. The main span measures 840 feet in length, and the loaded backstay on the Oklahoma end is 420 feet in length. The towers supporting the cable are about 130 feet above mean low water. Pipe lines are carried on steel floor beams, hung by suspender cables from main

cables of the bridge. Each of the two concrete block anchors for the structure weighs more than 40,000 pounds. Steel U-bolts, looped over steel rails embedded in the concrete, serve to connect the cables to the anchors.

The location of the bridge site presented many difficulties, the Red River being a relentless foe of any structure built in its floodway. Two steel caissons 7 feet in diameter were sunk to support each main pier.

The bridge was constructed by the Southwest-L. E. Myers Company, of Dallas, Texas. Matthews and Kenan, San Antonio, consulting engineers, designed the structure.



This Suspension Bridge Carries Two 16-Inch Gas Lines Across the Red River, Between Oklahoma and Texas

# IRON, STEEL AND METAL MARKET

## Increased Steel Production

Pittsburgh, July 18—[Special.]—In the last few days, developments have indicated that the steel trade has passed the low point and has nothing but chances of improvement before it. The significant thing was a full return of steel production to the rate in the last two weeks of June, perhaps with a little margin to spare. Very light production the first two days of July, and in the following week, was shown to be a result of the midyear date, with its inventory, and the national holiday.

Heavier steel production last week, at 15 to 16 per cent of capacity, was due not to any accumulation or backlog of orders but to ordinary current demand, which once set up would not be likely to recede.

Apart from the showing in steel itself, the steel trade is of opinion that general business has now rounded, or is engaged in rounding, some sort of a turn after its recession of three years; a recession from a peak of activity which began in July, 1929. The Lausanne accord, the influence of various constructive efforts at home, and the recent tendency of commodity price indexes to rise, are cited as representing a preponderance of good news after a long period in which practically all news was bad.

No really substantial increase in steel tonnage is expected before September, but it is amply sufficient to make a favorable prospect that recession in tonnage is ended and a little increase in the next few weeks is probable.

Seasonal decreases in steel requirements in various outlets had already made their impression on the sum total of steel production before the end of June, with the exception of tin plate, which held up well through June, later than usual, and is marked for decreases this month and next, and the further exception of requirements of the Ford Motor Company.

Fabricated structural steel awards reported in the last two weeks aggregated about 16,000 tons, making a light fortnight. The official reports showed May at fully 50 per cent above the average of the first four months of the year, and trade reports have indicated that June ran well above May, so that the general trend has been quite favorable.

Finished steel prices are unchanged but on the whole make a slightly better showing since some concessions given in certain cases have been reduced somewhat in the last three weeks.

## Birmingham Sheet Mills More Active

Birmingham, July 18—[Special.]—Industrial leaders in the Birmingham district are hopeful that within a few weeks there will be absolute knowledge of the turn for the better in general conditions. With the exception of a few orders for various steel shapes there is a minimum of production noted. The pig iron market is lifeless, the few orders coming in being for small tonnages, four blast furnaces, three on foundry and one on basic iron, making a larger tonnage than is necessary.

Few interests melting pig iron are requiring any tonnage, the cast iron pressure pipe operations of the district being estimated at below 30 per cent capacity. It is admitted that these interests are keeping warehouse stock in fine shape and meeting the small lot orders. The culvert manufacturers have been buying some iron.

Sheet mills of the district, modern mills, have been a little more active in the past two weeks than for some time. The spurt with the Gulf States Steel Company brought about operation of two open hearth furnaces, the blooming mill, the plate mill, the sheet mill and portions of the wire and nail mills. The Tennessee Coal, Iron & Railroad Company has been operating the Fairfield Works on a fairly good schedule, everything considered, four of the nine open hearth furnaces producing ingots.

Surveys made by various associations and organizations bring out the necessity for great needs for cast iron pipe in various cities and counties throughout the country. The need for steel is also shown. Steel fabricators are giving much hope to road building which will be furthered through Federal financing, there being need for a little tonnage of steel in this direction.

Rumors are current that in the decentralization of operations of the mills of the Steel Corporation, Birmingham district will be designated as one of the operating centers and that there will be a solicitation of business in a more general way than ever before. That the Birmingham district is able to fill contracts for the products usually required in this section is a fact, the developments by the Steel Corporation in the past few years being along lines of modern construction. The effect of this decentralization plan will be felt within a short time, it is stated.

## Metal Prices Decline

New York, July 18—[Special.]—Metal trends are still downward despite the fact that the average price of basic commodities in general has risen  $5\frac{1}{2}$  per cent in the past six weeks. Lead has sold at new low levels in 40 years. Copper has sold at record low prices in Europe, while American quotations coincide with the all-time low. Zinc has been losing ground. Silver continued its downward tendency.

Operations in the steel industry have rebounded to 16 per cent of capacity as against the recent low of 11 per cent. Automobile production for July is predicted at 160,000 units as against 190,600 cars and trucks during June.

The feature of the copper market is that American prices have been above world levels, whereas in former times the American quotation was the lower. The domestic price of copper has weakened to  $5\frac{1}{4}$ c per pound as against  $5\frac{3}{4}$ c formerly. The official price of Copper Exporters, Inc., has been  $5\frac{1}{2}$ c but no sales have been made at that figure since Japanese producers have been selling to Europe as low as  $4\frac{3}{4}$ c.

American copper producers have lost their foreign markets completely, at least for the time being. To get foreign business, the copper producers will probably have to do the same as the steel makers—name much lower prices than the domestic market to capture foreign business. Many leaders of the copper industry are enthusiastic over the American duty of 4 cents per pound and point out that it has already proved beneficial in that American prices are  $\frac{3}{4}$ c per pound or more higher than world levels.

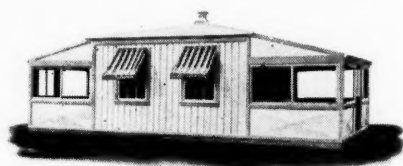
The price of lead has come down \$6 per ton from the level stabilized since March 23. The price at New York is 2.70c per pound; at East St. Louis, 2.55c. The declines have not stimulated business, further reductions apparently being awaited. The zinc market has sagged to 2.50c per pound, East St. Louis. The most drastic change was in the ore market, or to \$16 per ton from \$20. Zinc also has been extremely quiet.

Tin has been steadier than other metals because of the many artificial schemes to maintain prices. American consumers have not been active purchasers during the past week. Tin consumption in this country has been declining. Tin plate production is at 45 per cent of capacity as against 55 per cent a fortnight ago.

# NEW AND IMPROVED EQUIPMENT

## Fabricated Steel House

An inexpensive steel house, designed for use as a summer camp or as a permanent home, has been placed in production by the Columbian Steel Tank Company of Kansas City. Each house is designed with a standard basic unit 16 feet square to which standardized additions half that size may be made. These may take the form of additional rooms, or they may be screened in as porches or adapted to serve as a garage. Rolled steel sheets form the exterior walls and roof, the sides and roof being



Designed for Summer Use or Permanent Home

lined with a thick surface of insulated material to form the interior finish and at the same time to act as an effective protection against outside temperatures.

The manufacturers announce that following the erection of one of these houses on Missouri's new Lake of the Ozarks many inquiries were received from persons who desired to buy such houses for erection on suburban sites. Recently real estate developers in the Kansas City territory have erected such houses on lots and are selling the house and lot for around \$1000.

## Heavy Duty Trucks for Department of Agriculture

An accompanying illustration pictures ten trucks as they left the plant of the Oshkosh Motor Truck Company, Oshkosh, Wis., for delivery to the Department of Agriculture at Fort Logan, Col. They are 5-ton 4-wheel drive jobs powered with Model "RXC" 4 $\frac{5}{8}$ x5 $\frac{1}{4}$ -inch

six cylinder heavy duty Hercules engines manufactured by the Hercules Motors Corporation, Canton, Ohio. Engines are governed at 2000 rpm and the trucks are capable of 32 miles an hour when equipped with 9.75x20 Firestone balloon tires. A 7-speed Brown-Lipe transmission is used. Axles are equipped with Wisconsin dual reduction differentials of 9.6:1 ratio, the Oshkosh automatic locking sub-transmission and differential furnishing a means of dropping the power to the differential level. The trucks are equipped with Westinghouse air brake operation; Bendix brakes, in addition to the regular Oshkosh 4-wheel braking system, and with a new Woods type telescopic hoist.

## Mazda Photoflood Lamp

Westinghouse Lamp Company, New York City, announces a Mazda Photoflood lamp with an A-21 inside frosted bulb, an overall length of 9 $\frac{15}{16}$  inches and medium screw base. It is designed for 105 to 125 volt service. This lamp is said to be particularly suited as a companion lamp to the Photoflash lamp for taking still pictures and convenient for taking home movies. It may be placed in any house lighting socket or fixture. Approximately 3000 feet of 16 mm. motion pictures at normal speed may be made during the life of one lamp.

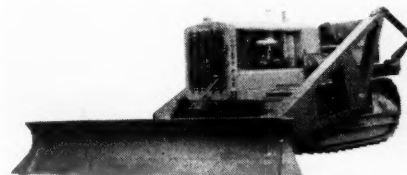
## Elwell-Parker Fork Type Truck

Differing from the lift truck in the method of carrying the load, a new type fork truck has been designed by the Elwell-Parker Electric Company, Cleveland, Ohio. On the fork truck the load is carried outside the wheel base on the forks, instead of on the platform itself, so that the load is not interfered with by the wheels. While standard skid platforms may be handled by means of the same forks, in order to take full advantage of possible savings, a special type of skid or "pallet" is used. These pallets may be of wood with a 2-inch

clearance between the "table top" and the lower cross ties, so that the chisel edge of the fork may be inserted under them. Elwell-Parker fork trucks are designed in capacities from 1000 pounds up.

## Hydraulic Roadbuilder for "Caterpillar"

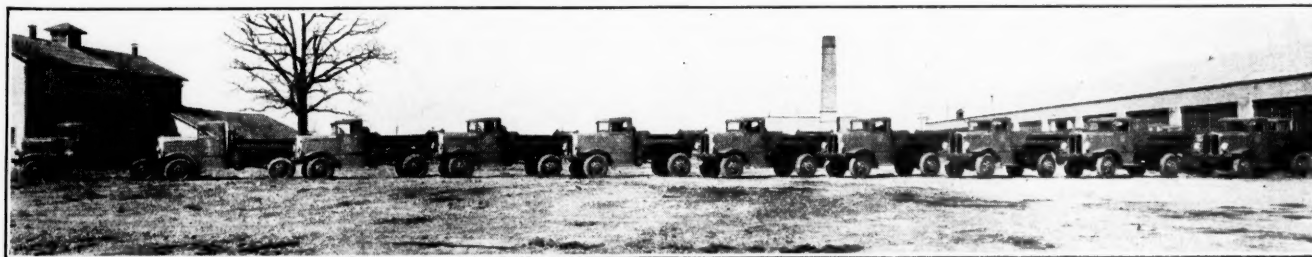
The LaPlant-Choate Manufacturing Co., Inc., Cedar Rapids, Iowa, announces a new Hydraulic Roadbuilder for use on the "Caterpillar" Thirty-five tractor. Outstanding features of the unit make it particularly useful for building mountain roads, trails, fire-breaks and other jobs where it is necessary to cut into a side bank. The blade is 9 feet 4 inches long and is completely oscillating, hav-



## Cuts—Backfills—Bulldozes

ing adjustments to lock either end in any position desired. A sharp, all steel removable cutting bit is provided at each end. For backfilling or sidehill cutting work, the blade may be set at an angle, and for bulldozing work may be set straight across. Features of the machine are 31-inch lift of the blade above ground level; newly designed main frame and jack, enabling the blade to be forced into the ground 20 inches, and double acting jack to force the blade in the ground or raise it out in hard going.

Brief bits of information regarding the uncrating of new furniture are being distributed by the Southern Railway System, N. R. Keeling, district freight agent, Baltimore. The use of a small panel saw, instead of hammer and pry bar, is advocated.



Fleet of Oshkosh Heavy Duty Trucks of Latest Design Purchased by the Government



# CONSTRUCTION DEPARTMENT

## and

# NEW ENTERPRISES

Covering the initial announcements of new undertakings with additional information about enterprises previously mentioned. The date at the end of an item indicates preliminary facts were given in a previous issue.

When writing to a new firm or corporation the name of at least one of the incorporators should be placed on the envelope to expedite its handling by the local postoffice. Mail may be delayed unless complete address is given.

Building and Construction Proposed and Contracts Awarded; Manufacturing, Mining, Power, and Land Developments; Public Works; Transportation; Communication; Financial Enterprises; New Business Opportunities Reported in the Sixteen Southern States.

The Daily Construction Bulletin gives each business day advance news published in this weekly review. It is invaluable to those requiring prompt information. Subscription price \$10.00 a year.

### Airports, Airplane Plants, Etc.

Ala., Verbena—Lion G. Mason, Mgr. Montgomery Airport, Montgomery, developing emergency landing field on banks of Coosa River about 2 miles from Mitchell dam; cover 16 acres; approximately 1650 ft. long and 400 ft. wide.

Ark., Little Rock—N. E. Busby & Co., 4004 Main St., Dallas, has contract at \$25,437, for installing lighting facilities on Dallas-Little Rock section of Dallas-Louisville Airway.

Ga., Adairsville—H. H. Thorburn, Charleston, S. C., in charge of enlarging landing field, 3 miles north of town.

Ky., Bowman Field—Aqua Systems, Inc., 2 Lafayette St., New York, has contract for gasoline fueling system for Constructing Q. M.

La., New Orleans—Bd. of Levee Commrs. of Orleans Levee Dist., 606 Common St., John Klorer, Ch. Engr., receives bids July 28 for furnishing material, equipment and constructing creosoted bulkheads and trestles and furnishing and placing of rock fill in area between East end of Lake Front seawall and West end of Shushan Airport wall; project consists of following: Item No. 1—988 ft. of Type A bulkhead; No. 2—285 ft. of sheet pile wall, Type B bulkhead, with 40 ft. sheet piling; No. 3—422 ft. of sheet pile wall, Type B bulkhead, with 30 ft. sheet piling; No. 4—507 ft. of double walling for Type B bulkhead; No. 5—85 vertical piles 50 ft. long for Type B bulkhead; No. 6—85 batter piles 55 ft. long for Type B bulkhead; No. 7—2300 tons of rock; No. 8—53 ft. of trestle on west side and 53 ft. trestle east side on Industrial Canal. Following estimating: Hydroplane Ramp—Thomas Carey, Pan-American Bldg.; W. Horace Williams Co., Inc., Southern Bldg.; Concrete Construction Co., 1204 Desire St.; Gervais F. Favrot, Balter Bldg.; Dalgarn Construction Co., Louisiana Bldg.; Doullut & Ewin, Inc., Queen and Crescent Bldg.; Walter P. Villere; Lester F. Alexander Co., Audubon Bldg.; Littrell Construction Co., Pan-American Bldg., all New Orleans; Foreum-James Co., Lynchburg, Tenn. Bulkhead and Rock Fill—Thomas Carey, Pan-American Bldg.; W. Horace Williams Co., Inc., Southern Bldg.; Doullut & Ewin, Inc., Queen and Crescent Bldg.; Walter P. Villere, Littrell Construction Co., Pan-American Bldg.; Lester F. Alexander Co., Inc., Audubon Bldg.; Gervais F. Favrot, Balter Bldg., all New Orleans. 7-14

Mo., Springfield—J. David Hamel, Asst. Airport Mgr. and Engr., making estimates of cost of improvements to municipal airport from plans submitted by J. H. Karchmer, Chmn. to park board airport committee by H. H. Gallup, of Transcontinental and Western Air, Inc.

Mo., St. Louis—John J. Sheedy & Co., Cheyenne, Wyo., has contract at \$27,673, for establishing airway beacon sites on Amarillo-Tulsa section of Amarillo-St. Louis airway.

Mo., St. Louis—W. F. Moody & Co., Natl. Standard Bldg., Little Rock, Ark., has contract for installing lighting facilities on Dutchtown-St. Louis Section of New Orleans-St. Louis airway.

Mo., St. Louis—See Sewer Construction.

Texas—R. E. Broome, Florence, Miss., has contract for reconstruction boundary lighting system Smith Grove, No. 71, Nashville-Louisville section of Dallas-Louisville Airway.

Tex., Fort Worth—American Airways, Inc., subsidiary of Aviation Corp., 122 E. 42nd St., New York, Jesse Maxwell, local representative, reported, changed plans for erecting hanger at Municipal Airport; will be 236x160 ft., 2 stories; complete plans and call for bids within 2 weeks. 5-19

### Bridges, Culverts and Viaducts

#### Proposed Construction

FLORIDA—State Road Dept., Tallahassee, has approval of War Dept. for bridge over Peace River, 3 mi. south of Wauchula. 6-23

MARYLAND—State Roads Comsn., L. H. Stuart, Sec., Baltimore, opens bids July 26 for bridge in following county:

Washington—Bridge over Conococheague Creek, Fairview-Cearfoss Road; struc. steel truss superstructure involving double 133-ft. span, 27-ft. roadway; W-112-1-62.

Mo., Independence—City Council instructed Robert H. Jones, City Engr., to prepare plans for bridge over Missouri Pacific tracks at South Chrysler St.; Roger T. Sermon, Mayor.

Mo., Independence—Jackson County Highway Engineering Dept., Leo E. Koehler, Engr., 508 Interstate Bldg., Kansas City, opens bids July 26 for five bridges.

OKLAHOMA—See Roads, Streets and Paving.

#### Contracts Awarded

GEORGIA—State Highway Board, Atlanta, let contracts for projects in following counties:

Clinch—bridge over Suwanee River, on Homerville, Ga.—Lake City, Fla., road, Sims & Clonts, Powder Springs, \$20,283.

Dawson—bridge over Etowah River, on Dawsonville-Gainesville road, Nichols Contracting Co., 1281 La France, N.E., Atlanta, \$8,458.

Macon—two bridges, on Americus-Montezuma road, Somers Construction Co., Vidalia, Ga., \$8,967.

Oklahoma—Pittsburgh-Des Moines Steel Co., Des Moines, Iowa, reported, has contract for 47 tons steel for two bridges.

Tex., Beaumont—Jefferson County Comms., B. B. Johnson, County Judge, let contract at \$103,900 to Christy-Dolph and Collins Construction Co., Beaumont, and Spence and Howe, Port Arthur, for Intracoastal Canal bridge, south of West Port Arthur; 1470 ft. long, bascule draw span, 15-ft. vertical clearance, 100-ft. horizontal clearance;

20-ft. roadway, one 4-ft. walk; approaches to consist of 270-ft. dirt fill and 360-ft. concrete; Craig P. Hazelet, Scherzer Rolling Lift Bridge Co., 53 W. Jackson Blvd., Chicago, designing engineer. 6-30

Va., Richmond—City let contract at \$5,891 to Transit Lumber Co., for 172,000 bd. ft. oak and pine lumber for repairs to Ninth Street bridge. 7-14

### Canning and Packing Plants

N. C., Shelby—Kiwanis Club, Dr. J. S. Dorton, Chmn. Committee, interested in establishing cannery, daily capacity 3000 cans.

### Coal Mines and Coke Ovens

W. Va., Morgantown—Arkwright Coal Co., Stephen Arkwright, Pres., let contract to Fairmont Mining Machinery Co., Fairmont, for conveyors, screens, chutes, etc., at mines; daily production of plant 1200 tons.

### Cotton Compresses and Gins

Okla., Elk City—Planters Gin Co. increased capital \$50,000 to \$500,000.

Tex., Circle Back—E. G. Gage & Sons, capital \$20,000, incorporated; E. G. aGage, Brewer Gage.

Tex., Kalgary—Pinkerton Gin Co., capital \$10,000, incorporated; A. Pinkerton, Hugh Nation.

### Cottonseed-Oil Mills

La., New Orleans—Southern Cotton Oil Co., Canal Bank Bldg., acquired control of South-Texas Co.'s mills in Evangeline and St. Landry parishes; will operate.

Okla., Elk City—Elk City Cotton Oil Co. increased capital \$350,000 to \$755,000.

### Drainage, Dredging and Irrigation

Md., Baltimore—Central Dredging Co., 307 N. Michigan Ave., Chicago, Ill., reported, low bidder at 12.74 cts. for dredging 953,000 cu. yds. from cut off section of channel leading to Baltimore; bids opened July 11. 6-16

### Electric Light and Power

Ark., Quitman—Clinton Light & Ice Co., Clinton, granted 25 yr. light franchise; will extend lines.

D. C., Washington—Combustion Engineering Corp., 200 Madison Ave., New York, has contract for 2 additional steam generating units for Central Heating plant; designed for 400 lb. pressure, continuous production of 21,000 lb. of steam per hr. and maximum of 237,000 lb. per hr. from and at 212 degrees Fahrenheit. 3-24

D. C., Washington—Stone & Webster Engineering Corp., Boston, in charge of work of designing and constructing new Buzzard Point Power Station for Potomac Electric Power Co., 10th and E Sts., N. W.; J. H. Ferry, Electrical Engr. Potomac Electric Power Co. 7-7

D. C., Washington—Northeastern Piping & Construction Co., Bryant St., North Tonnawanda, N. Y., has contract at \$1,194,826, for Central Heating Plant steam distributing system to serve various Government buildings; no sub-contracts let.

Ga., Waycross—R. H. Bouligny, Inc., 433 N. Morehead, Charlotte, N. C. has contract at \$22,300 for street lighting system. 6-16

Ky., Paris—E. T. Sheeler & Son, Paris, have contract for building to house electric plant; Fairbanks, Morse & Co., 900 S. Wabash Ave., Chicago, Ill., for plant; building will be 57x46 ft., conc., brick and steel; cost \$15,000. 7-14

Miss., Poplarville—Vinson B. Smith, Jr., Archt., Gulfport, preparing plans, soon call for bids to furnish material and labor to erect and equip light plant, also deep well with all necessary pump equipment; cost \$100,000.

Mo., Doniphan—W. O. Krueger, representing Chicago engineering firm and James Wilcox, Engr., reported making surveys of site for proposed hydro electric dam, for Current River Power Co., Kansas City; permit lately noted having been granted by Federal Power Comsn.; H. A. Tanner and E. B. Johnston, both Doniphan, interested. 5-26

Mo., St. Louis—Carl G. Stifel, 3600 N. Broadway, applied to Federal Power Comsn. for preliminary permit for power project on Mississippi River, Madison County; power to be used for industrial purposes at site of development.

Okla., Checotah—City voted 25-yr. renewal of electric franchise to Oklahoma Gas & Electric Co., 321 N. Harvey St., Oklahoma City.

### Fertilizer Plants

Va., Richmond—Stockholders of Virginia-Carolina Chemical Corp., Richmond, meet Aug. 7 to vote on proposed merger with Armour Fertilizer Works, Lexington Bldg., Baltimore, Md. 6-23

### Flour, Feed and Meal Mills

Tex., Sherman—See Building News—Contracts Awarded.

### Foundry and Machine Plants

Miss., Jackson—Southern Machinery Co., incorporated; Bernie L. Launchley.

### Garages and Filling Stations

Ala., Birmingham—Wm. H. Griffin erect drive-in filling station 7709 First Ave., North. Ala., Montgomery—Adams-Ivey Motor Co., incorporated; L. D. Ivey.

D. C., Washington—Stear Garage Co., incorporated; Leroy C. Smith, Hamilton Williams, 1604 N. Payson St., Baltimore, Md.

Fla., Miami—Standard Oil Co., 61 Flagler St., expending \$8000 for improvements to tanks and filling station, same location; day labor.

Md., Baltimore—Morris Fleishman, erect filling station southwest side of Park Heights Ave., near Hayward.

Md., Baltimore—George Cambria, Oliver and Chester Sts., let contract to George Bessel, 3005 Shannon Drive, to erect storage garage, 2431 Brentwood Rd.; conc. block, 1 story, 24x50 ft.; V. Paturzo Bro. & Son, 800 N. Haven St., have contract for conc. block.

Md., Baltimore—Lord Baltimore Filling Stations, T. J. O'Connell, Constr. Engr., American Bldg., receiving bids alteration and addition to filling station 1132 Cathedral St.

Tex., Amarillo—Keck Reo Co., Inc., chartered; L. A. Keck, S. E. Fish.

Tex., Edna—Wells Motor Co., capital \$18,000, incorporated; H. W. Wells, H. B. Stallings.

Tex., San Antonio—Plaza Auto Paint and Repair Shop, incorporated; M. S. Carneiro, Smith-Young Tower.

Tex., Temple—Bell Chevrolet Co., capital \$12,000, incorporated; M. D. Rodden, E. K. Owen.

W. Va., Fairmont—Currey Motor Co., capital \$25,000, incorporated; K. C. Currey, Peacock Park.

W. Va., Huntington—Automotive Electric & Tire Co. incorporated; R. C. Tarry, J. W. Fitchet.

### Gas and Oil Enterprises

Ala., Montgomery—Birmingham Gas Co., 317 N. 20th St., Birmingham, reported, negotiating for Industrial Gas Corp.; hearing Aug. 4 in Jefferson County Court house, Montgomery, before Alabama Public Service Comsn.

Ark., Lowell—Southland Gasoline Co. incorporated; B. J. Arbon, T. C. Tuttle, N. L. Carver, Resident Agt.

Fla., Arcadia—Southern Engineering and Management Corp., Jacksonville, applied to city for franchise for installing and operating gas lighting system.

Ky., Louisville—Kentucky Consumers Oil Co., Col. E. H. Hilpp, Mgr., advises contemplates erecting 50,000 to 100,000 bbl. tank storage to accommodate river shipment; necessary building other than steel storage already erected; do not contemplate erecting tanks or dock landing before 1933. 7-14

Miss., Biloxi—Southwestern Gas & Electric Co., Shreveport, La., granted permission by Bd. of Supervisors to lay gas mains along south side of Old Pass Christian Rd., from village of Handsboro to western boundary of Biloxi to building of U. S. Soldiers Home, now under construction on Naval Reserve Park section.

Mo., Kansas City—Dallas Oil Co., capital \$100,000, incorporated; J. D. Judd, 2024 E. Gregory Blvd.

Okla., Madill—Russell-Wham Development Co., incorporated; Jesse Russell, L. F. Wham.

Okla., Talinla—Wachata Gas Co., Inc., John M. Bailey, Sec., Dallas, Tex., has franchise from city and from 2 sanitariums; has at this time an estimated 1,000,000 ft. gas well; will drill 1 or more wells; will produce natural gas and sell to distributing company; H. A. Shellenberger, Muskogee, interested in distribution. 7-14

Okla., Woodward—Standard Gas Co., Exchange Bk. Bldg., Tulsa, reported, acquired Winchester Oil and Gas Co., serving Woodward; properties at Woodward, Waynoka, Avard, Quinlan, Hardtner, Cherokee, Moorland and Alva, included in purchase.

Tex., Galveston—Bayou Production Corp., capital \$40,000, incorporated; Frederick Fowler, 22nd & I Sts.

Tex., Longview—Wilson Wimberley Drilling Co., incorporated; R. Glenn Wilson, O. L. Sparkman.

Tex., Mount Vernon—Franco Oil Co. incorporated; A. P. McGee, O. G. Lynch.

Tex., Rosenberg—Lindy Jane Oil Co., capital \$10,000, incorporated; M. B. Traweck, 2603 Richmond St., Houston; Edward Risinger, Rosenberg.

Virginia—B. F. Flahive, Treas., Virginia Gas Distribution Corp., 61 Broadway, New York, advises acquired gas properties of Consumers Utilities Co., located in Staunton and Waynesboro; it is planned to serve natural gas in three communities in place of artificial gas now marketed; no construction work required, nor will any machinery or other equipment be necessary in connection with this change of ownership.

W. Va., Huntington—Victory Oil Co., 738 Fourth Ave., incorporated; H. H. Rosen, S. H. Wentraub; plans establishing oil distributing and storage plants; leased former King Cole blending and storage plant at Kenova.

W. Va., Spencer—Royal Gas Co., capital \$25,000, incorporated; Thomas P. Ryan, Spencer; Albert Mullins, Clay.

### Ice and Cold-Storage Plants

Fla., Tarpon Springs—Community Ice & Storage Co., capital \$25,000, incorporated; J. N. Craig, Nick Stevens; erect plant on Safford Ave. 7-14

Miss., McComb—J. W. West, Hartsville, S. C., remodel building 207 S. Broadway, for ice plant; will take over City Ice Service.

Va., Harrisonburg—City Ice and Storage Co., capital \$50,000, incorporated; C. A. Ritter, Baltimore, Md.

### Land Development

Ala., Florence—J. E. F. Westmoreland, plans development of Bailey Springs, 360 acres, for parks, playgrounds, dwellings, health resort hotel, bathing beach, etc.

Fla., Orlando—Sam Hutchins, Inc., chartered; B. A. Meginniss, E. M. Goode.

Fla., Miami—Obe Investment Co., E. W. Obermiller, 1845 S. W. 2nd Ave., develop 30 acre tract on West Flagler St. at 53rd St. for cemetery; work includes water system; fencing; roadways; landscaping, etc.; Watson & Garris, Engrs., 12th Floor Congress Bldg., Miami.

Fla., New Smyrna—H. W. Jordan Realty Corp., incorporated; H. W. Jordan, J. U. Gillespie.

Fla., Palmetto—E. C. McLean, Inc., capital \$15,000, chartered; E. C. McLean, O. McLean.

Fla., St. Petersburg—Jungle Pines Corp. incorporated; I. S. Merrell, 1019 Jungle Ave.

Fla., Winter Garden—Winter Garden Farms Co. incorporated; M. C. and P. H. Britt.

Md., Baltimore—Wayne Building Corp., 4713 Charlton Ave., incorporated; Earl W. Powers, Thomas E. Jones.

Mo., Kansas City—American Realty Co., incorporated; J. C. Springer, Topeka, Kansas; W. R. Springer, R. H. Sanneman.

Mo., St. Louis—Loco Realty Co., capital \$20,000, incorporated; George T. Burdeau, 801 Chestnut St.

N. C., Asheville—Carlberg & Cook, Inc., chartered; B. J. Carlberg, Emerson C. Cook.

Okla., Muskogee—West Side Realty Co., capital \$25,000, incorporated; L. F. Rooney, C. F. Gordon.

S. C., Cheraw—Home Realty Co. incorporated; John Maynard, Jr.

Tex., Dallas—Ellsberry Co., incorporated; S. A. Ellsberry, 1019 N. Madison St.

Tex., San Antonio—H. J. Shearer, Woodlawn Ave. and Lakeside Drive, develop additional section Woodlawn Park.

Tex., University Park, Dallas—City plans voting on bonds for purchase 7 additional acres for development Curtis Park; R. J. Dixon, Atty.

Va., Gate City—Holston View Cemetery, Inc., chartered; C. W. Kele.

Va., Pearlsburg—Boxwood Farm, Inc., chartered; Bernard Mason.

Va., Radford—Sunrise Burial Park Co., capital \$25,000, incorporated; Charles Einstein.

### Lumber Enterprises

Fla., Bonifay—Bullard-McKenzie Turpentine Co., DeFuniak Springs, reported, acquired 20,000-acre timber tract from Sessoms Interests; land located in Holmes and Washington Counties, is 80 per cent virgin pine.

Ga., Thomasville—George Mills, rebuild burned turpentine still on Thomasville-Monticello, Fla., highway.

Miss., Picayune—Goodyear Yellow Pine Co., L. O. Crosby, Pres., plans building additional yards and sheds; later may install plant to utilize stumps and pine knots in production of turpentine.

N. C., Hendersonville—Noca Lumber Co., capital \$50,000, incorporated; John M. Thompson, L. B. Prince, L. N. Bly.

S. C., Anderson—Charles R. Johnson acquired assets of W. L. Brissey Lumber Co., including machinery, buildings, etc.

### Mining

Va., Indian Rock—James River Hydrate and Supply Co., capital \$200,000, incorporated; L. P. Dillon.

### Miscellaneous Construction

Ala., Birmingham—Engineers of Tennessee Coal, Iron & Railroad Co., reported, completed plans and specifications for changing course of Valley Creek at Delonah



Quarry, involving expenditure of \$300,000; soon call for bids; work to begin in 30 days.

Ark., Helena—C. G. Kershaw Contg. Co., Martin Bldg., Birmingham, Ala., reported, has contract for constructing conc. wall for Government; work includes 7600 cu. yards excavation; 3800 cu. yds. of conc.; 180,500 lbs. rein. steel; 26,600 lbs. struc. steel and anchors; 165,000 square ft. steel piling; 4750 sq. yds. riprap paving, etc. 6-9

Ark., Helena—U. S. Engineer Office received low bid from Edw. H. Polk, Helena, for 25,000 cords of willows to be used in river bank protection.

Ark., Texarkana—J. D. Young, Contr., constructing swimming pool on 2 acre site, E. 9th St., for Y. W. C. A. Memorial Camp.

Fla., Miami Beach—Warren Wright, 33 N. LaSalle St., Chicago, Ill., granted permit to construct \$16,000 bulkhead and groynes for \$300,000 estate now under construction at 5255 Collins Ave.; Martin L. Hampton, Archt., 2939 Indian Creek Drive, Miami Beach; G. O. Reed, Inc., Contr., 1345 20th St.

Fla., Miami—War Dept., U. S. Engineer Office, B. C. Dunn, Major, Corps of Engrs., District Engr., Jacksonville, advises Miami harbor being improved under contract with Standard Dredging Co., New York, which has subcontracted work to Clark Dredging Co., Miami; work consists of dredging soft material and rock to produce channel 15 ft. deep, 90 ft. wide in upper portion and increasing to 150 ft. at the mouth; provision of channel of 35 ft. depth at Miami under consideration but has not been adopted by Congress. Congress has provided for maintenance of Hollywood Harbor (Port Everglades), as constructed by local interests, but no provision has been made by Congress for widening.

Louisiana—Bd. of State Engineers, Room 207, New Orleans Court Bldg., receives bids Aug. 1 for constructing levee work in Plaquemines Parish East Bank Levee Dist., Harlem to Bohemia Upper Line.

La., New Orleans—A. P. Boh & Co., 822 Perdido St., has contract for constructing \$110,000 extension to Charbonnet St. wharf for Port of New Orleans; 300 ft. long; modern fireproof construction; equipped with sprinkler system; will provide additional wharfage for new warehouse and compress to be constructed by New Orleans Compress Co.; work on both projects to be completed by Oct. 15. 7-14

Md., Baltimore—E. T. Foreman Co., 125 N. High St., will proceed with erection of incinerator on Reed Bird Island; Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa., will supply equipment; building will be 1 story; brick; 50x250 ft.; project includes erection and operation of plant for 10 years and hauling of rubbish for 5 yrs. 6-23

Md., Baltimore—E. T. Foreman Co., 125 N. High St., has contract at \$4,292,000 for constructing Reed Bird Ave. garbage incinerator, collection and hauling of rubbish for 5 yrs., incineration of rubbish for 10 yrs. and incineration of garbage for 10 yrs. 6-23

Md., Baltimore—Pennsylvania Railroad will probably rebuild burned piers on Clinton St., fireproof; George M. Smith, Supt. Baltimore Dist.

Mississippi—U. S. Engineer Office, P. O. Box 97, Memphis, Tenn., receives bids Aug. 2 for constructing approximately 2,080,000 cu. yds. earthwork, in upper Yazoo and White River Levee Districts.

Mississippi-Louisiana—U. S. Engineer Office, Box 667, Vicksburg, Miss., receives bids Aug. 4 for constructing approximately 9,731,900 cu. yards of earthwork on east and west banks of Mississippi River in Mississippi and Louisiana.

Missouri—M. A. Wogan, 3200 Rames St., Kansas City, low bidder at \$61,885 for constructing 3700 ft. of standard pile clump dikes in Missouri River at St. Charles and Waldon Springs Bends, Mile 25 to 46; Woods Bros. Constr. Co., Lincoln, Nebr., low bidder at \$37,980, for 2400 ft. of standard pile clump dikes in Missouri River at Pinckney Bend, Mile 87 to 92; W. A. Snow, Major, Corps of Engineers, Dist. Engr., 428 Custom House, St. Louis.

Missouri—The Massman Const. Co., New York Life Bldg., Kansas City, low bidder at \$129,600 for constructing 4200 ft. of Standard pile clump dikes and about 2100 ft. of crib dikes in Missouri River at Hinkles Bend, mile 62 to 67; W. A. Snow, Major, Corps of Engineers, Dist. Engr., 428 Custom House, St. Louis.

Tenn., Memphis—S. & W. Construction Co., Shrine Bldg., advises have begun pile driving in connection with contract for addition to unloading shed and transfer dock for Anderson-Clayton & Co.; wood structure supported on wooden piles; 1 portion 2 stories, second story to be used for cotton classing; all lumber for framing purchased; no sub-contracts let; practically none to be let. 7-14

S. C., Walhalla—Town, George L. Wilson, Mayor, interested in building swimming pool; 60x120 ft. or larger. See Want Section—Miscellaneous.

### Miscellaneous Enterprises

Fla., Clearwater—Osceola Inn, Inc., chartered; W. H. Wolfe, L. Sutton, R. Q. Smith.

Fla., Miami—Pineapple Refreshments Bottling Corp., incorporated; H. Munez, M. B. Wiseheart.

Fla., Orlando—Farmer Publishing Co., Inc., chartered; E. P. Owen, Jr., J. E. Fant.

Ky., Louisville—United Oriental Cleaners, incorporated; Richard Burkhardt, Homer Rueff.

Ky., Louisville—Scobee Brothers Hardware Co., capital \$10,000, incorporated; Charles R. Scobee, 2718 S. Third St.

La., New Orleans—Architectural Stone Co., Inc., capital \$41,000, incorporated; Victor Lachin, 8122 Colapissa.

La., New Orleans—Intercoastal Barge Line, J. W. Clark, Pres., Mobile, Ala., announced inauguration of barge service from New Orleans to Gulfport, Biloxi and Pascagoula, Miss., Mobile, Ala., Pensacola, Apalachicola, Panama City, Carrabelle and Tampa, Fla., and Baton Rouge, La.; operate 3 all-steel covered barges, 1 tow boat and number of open barges; later plans expansion of service to include Texas ports; New Orleans office 608 Canal St.

La., New Orleans—Wackman Welded Ware Co., St. Louis, Mo., leased Stern Foundry property at Market and Annunciation St.; installing machinery; manufacture steel barrels and kindred products.

Md., Baltimore—Canadian Club Corp., 1623 Munsey Bldg., incorporated; Bert E. Cronk, 3417 St. Ambrose Ave., Baltimore; bottling mineral waters.

Md., Baltimore—Superior Construction Co., 1504 First Natl. Bank Bldg., incorporated; Urban J. B. Link, John Chester.

Md., Baltimore—Paul-Rice Engineering Co., 4008 Dalrymple Ave., incorporated; Henry Norbert Paul, Hiram C. Griffin.

Md., College Park—American Publishing Co. incorporated; Milton S. Collins, College Park; Guy R. Moore, Washington, D. C.

Miss., Greenville—R. J. Scarseth, Repr. of Heidel-Hydrating Co., Milwaukee, Wis., erect alfalfa dehydrating plant on Stone and Fort Dunleith plantation near Dunleith Station adjacent to present plant; combined output of 30 tons of alfalfa meal daily; increase production capacity from 1½ carloads to 3 carloads; cost \$20,000.

Miss., Natchez—R. Lee Parker rebuilding burned packing plant on Washington Rd.; 2 boiler rooms and slaughter pens under construction; conc. and steel, fireproof; no cold storage rooms or house to be constructed at present time. 6-23

Mo., Excelsior Springs—Natural Crystals, Inc., M. S. Jones, Sec., 457 Thompson Ave., plans installing plant for manufacture mineral water crystal. 7-7

Mo., St. Louis—Oh Boy Ice Cream Co., incorporated; Steve Vellios, 6248 Delmar.

Mo., St. Louis—Security Wire Products Co., incorporated; H. Magidson, 2714 S. Second St.

Mo., St. Louis—Telebmann, Inc., chartered; Oliver Hoffman, 6144 S. Grand St.; bakery.

Mo., St. Louis—Maison Marivonne, Inc.,

chartered; Wm. Knuppenacher, O. A. Caldwell; manufacture insecticides.

Mo., Warrensburg—Lake of the Ozark Creamery, capital \$10,000, incorporated; E. C. Hamlin, Springfield; Sidney J. Burks, Warrensburg.

N. C., Charlotte—Swinson and Presson, Inc., changed name to S. and P. Food Products, Inc.; L. I. Ritchie, Pres.

N. C., Edenton—Brown Brothers, O. H. Brown, successors to M. G. Brown, wholesaler of flour, sugar, etc., expanding to include full line grocery store items.

Okla., Drummond—Drummond Co-Operative Elevator Co., capital \$15,000, incorporated; C. W. Smith, S. T. Allen, 506 First Natl. Bank Bldg.

Okla., Idabel—Interstate Tobacco Co., Inc., chartered; W. B. Chandler, F. R. Lawhon.

Okla., Oklahoma City—Triple XXX Thirst Station, capital \$25,000, incorporated; D. G. Carpenter, Oklahoma City; I. A. Stein, 2310 L St., Galveston, Tex.

Okla., Oklahoma City—Central Printing Co., capital \$10,000, incorporated; James H. Berry, 710 W. 16th St.

Okla., Tulsa—Van-a-Tee Garment Co., capital \$10,000, incorporated; C. W. Benedict, 1727 S. Peoria.

S. C., Florence—Fairfield Dairy incorporated; F. H. McLeod, James C. McLeod.

Tenn., Clarksville—Dunbar Cleve-Idaho Spring Co., capital \$25,000, incorporated; J. B. Miller, Horace B. Stout.

Tex., Abernathy—Struve Cheese Co., F. W. Struve, enlarge cheese plant.

Tex., Dallas—Austin Road Co., incorporated; J. B. Templeton, 4223 Rawlins St.

Tex., Dallas—Three Flowers Ice Cream Co., capital \$30,000, incorporated; E. D. Bishop, 1713 N. Fitzhugh St.

Tex., San Antonio—Jewish Recorder Publishing Co. incorporated; Louis P. Shapiro, M. H. Juran.

Tex., Trinity—Highway Hotel, capital \$10,000, incorporated; W. F. Thornton, J. B. Thornton.

Va., Emporia—Merchants Mfg. Co., incorporated; P. F. Weaver; manufacture floor sweeping compound.

Va., Fredericksburg—National Chemical Distributors, Inc., incorporated; S. M. Janney.

Va., Norfolk—Ghent Hotel Corp., incorporated; Albert G. Hofheimer, 700 Maury Place.

W. Va., Lewisburg—Greenbrier Clothing Co., capital \$10,000, incorporated; H. H. Drumheller, Thomas R. Jasper.

W. Va., Wheeling—Southern Viabi Co. of West Virginia chartered; James Sharp, Abby J. Boardman; chemicals.

### Motor Bus Lines and Terminals

D. C., Washington—United Motor Terminals, Inc., M. P. St. Clair, Pres., leased property N. W. Cor. Pennsylvania Ave., Sixth St. and C St. as site for union bus terminal; raze existing buildings; erect 1-story and basement, fireproof, limestone building with floor space of 19,000 sq. ft.; store space on Pennsylvania Ave. front; C St. will be entrance for terminal; terminal will accommodate 20,000 persons daily and have platforms capable of loading and unloading 1000 buses daily; waiting room will contain children's nursery; dental office; headquarters for shopping package service; restaurant; novelty shop; dry cleaning establishment, etc.; later may change terminal to contain hotel and garage; Milburn, Heister & Co., Hill Bldg., Archts.; Consolidated Engineering Co., 20 E. Franklin St., Baltimore, Md., Bldrs.; work to start about Aug. 15.

Fla., Miami—Florida Motor Lines, Inc., Orlando, C. G. Medlock, Local Mgr., Miami, having plans prepared by C. Heyward Oemler, 1014 Realty Board Bldg., Miami, for 1 story bus terminal N. E. 1st St. and 3rd Ave. 6-2

Ky., Shelbyville—Webb Transfer Co. and Rowletts & Hower, applied to Cliff Claypool, Comms. Motor Transportation, Frankfort, for permission to operate motor bus line.

Miss., Vicksburg—City voted to have street



cars replaced with buses; Mississippi Power and Light Co., will make the change.

**N. C.** Winston-Salem—Union Motor Freight Terminal Co., capital \$25,000, incorporated; George D. Lentz, C. A. Lentz.

**S. C.** Charleston—E. T. Brown and C. P. Jameson, both Georgetown, applied to State Railroad Comsn., Columbia, for permission to establish Class D motor freight service, Charleston and Conway.

### Railways

**Md.** Baltimore—Pennsylvania Railroad let contract to M. A. Long Co., 10 W. Chase St., for coal handling yard at Bolton Station, part of \$22,500,000 improvements planned and under way by railroad company; work to begin in few days; will involve rearrangement of tracks in portion of the yard and replacement of present coal handling equipment with modern machinery, including silos; cost \$150,000; W. E. Wood, Engr.

**Tex.** Del Rio—Del Rio and Northern Ry. Co. organized, 1931, filed application with Interstate Commerce Comsn., Washington, for permission to construct railroad in Maverick, Kinney, Val Verde, Edwards and Sutton counties; distance of 130 miles.

**W. Va.** Gilbert—Boxley Brothers Co., Inc., Orange, Va., has contract for railroad for Virginia & Western Ry.; right of way being cut and plant unloaded; work under way in about 10 days; work consists of approximately 500,000 cu. yard excavation, mostly rock and 2 bridges over the Guyandot River, bridges will contain approximately 12,000 cu. yards of conc. in sub-structure; last mile of work is a yard project; when completed company will have line from Guyandot River from Mullens, W. Va., to Gilbert, W. Va.; Gilbert will be a junction point with the N. & W. Railway and the C. & O. Ry.; F. C. Sammons Co., Inc., Huntington, will do all the work for Boxley Bros. 7-14

### Roads, Streets and Paving

#### Proposed Construction

**Ala.** Maxwell Field, Montgomery—Constructing Quartermaster postponed opening bids for roads, driveways and sidewalks in officers' area to Aug. 1 from July 12. 6-23

**GEORGIA**—State Highway Dept., Atlanta, may ask bids soon on paving Route 38, between Hinesville and Midway; eliminate curves on Forsythe Road, near Colaparchee, and curves on Atlanta-Jacksonville Highway.

**KENTUCKY**—State Highway Dept., Frankfort, opens bids Aug. 10 for projects in following counties:

**Breathitt**—7 mi. grade and drain, Jackson-Booneville Road, Jackson southwest of Hadix Fork School;

**Campbell-Pendleton**—6 mi. grade and drain, Peach Grove-Grants Lick Road, junction with Newport-Falmouth Road to Peach Grove;

**Edmonson**—8.25 mi. surfacing, Bowling Green-Cave City (US 31-W) Road, Warren County line to Barren County line near Glasgow Junction;

**Harrison**—9.4 mi. grade and drain, Cynthia-Williamstown Road, Breckinridge to Grant County line;

**Henderson**—2.7 mi. surfacing, Henderson-Evansville Road, junction with US 60 near Henderson to south of Henderson-Evansville bridge;

**Kenton**—4 mi. surfacing, Covington-Morning View (DeCoursey) Road, south of Covington southward toward Steep Creek; 2.9 mi. surfacing, Covington-Erlanger (US 25) Covington to Fort Mitchell;

**Livingston**—9 mi. surfacing, Smithland-Marion (US 60) Road, Burna to Crittenden County line;

**Logan**—bridge and approaches over L. & N. track at Epley on Russellville-Dunmore Road, involving two 40-ft. and one 45-ft. rein. conc. span, rein. conc. piers and abutments, grading and draining earth approaches;

**Magoffin**—7 mi. grade and drain, Salyersville-Hindman Road, Royalton to east of Fredville post office; 6.9 mi. grade and drain, Salyersville-Jackson Road, junction with

Salyersville-West Liberty Road west of Salyersville to mouth of Boardtree Fork;

**McCreary-Whitley**—13.7 mi. grade and drain, Pine Knott-Williamsburg Road, junction with US 27 at Pine Knott and to southwest of Williamsburg;

**Owen**—7.7 mi. surfacing, Owenton-Dry Ridge Road, junction with Owenton-Dry Ridge Road to Grant County line;

**Owsley**—3.8 mi. grade and drain, Booneville-Jackson Road, Booneville to Leros;

**Pulaski**—8.6 mi. surfacing, Somerset-Russell Springs Road, west of railroad crossing at Somerset to near Nancy.

**KENTUCKY**—State Highway Dept., Frankfort, has low bids for projects in following counties:

**Christian**—10.152 mi. Portland cement surfacing, Hopkinsville-Cadiz Road, FA 93 A-S & 44 A-S, W. F. Robinson Son & Waitman, Owensboro, \$135,151;

**Crittenden**—6.116 mi. grade and drain, Mexico-Dycusburg Road, via Francis, SP 387 A-G, with first-class rein. conc. pipe, D. W. Dickinson Co., Trenton, \$19,712; 3.573 mi. grade and drain, Marion-Providence Road, SP 236 B-G, Corum Brothers, Madisonville, Ky., \$52,185;

**Elliott**—9.535 mi. grade and drain, Sandy Hook-Louisa Road, J. M. Cain & Co., Inc., Louisa, \$121,544;

**Johnson**—2.044 mi. grade and drain, Paintsville-West Liberty Road, FR 27 A-G, with first-class rein. conc. pipe, Campbell-Johnson Co., Pikeville, \$27,261. 6-30

**MARYLAND**—State Roads Comsn., L. H. Steuart, Sec., Baltimore, opens bids July 26 for projects in following counties:

**Anne Arundel**—7.7 mi. macadam widening and conc. curb, Annapolis Blvd. and General's Highway through Glen Burnie, AA-143-711;

**Carroll**—1.28 mi. conc., Mexico-Hampstead Road, CI-117-52;

**Charles**—1.36 mi. gravel, Waldorf toward Berry, Ch-47-S1; 1.08 mi. gravel, La Plata-Bryantown Road toward Brice, Ch-120-S2; 1.42 mi. gravel, Horsehead-Patuxent Road, Prince George's County line to Patuxent, Ch-121-28.

**MARYLAND**—State Roads Comsn., L. H. Steuart, Sec., Baltimore, has low bids for projects in following counties:

**Dorchester**—4.48 mi. macadam resurfacing, near Golden Hill to Fishing Creek, T. Edgie Russell Co., Frederick, \$81,202;

**Frederick**—6.93 mi. conc. shoulders, Taneytown-Emmitsburg Pike, Carroll County line via Emmitsburg to Pennsylvania State line, L. R. Waesche & Sons, Inc., Thurmont, \$56,811;

**Wicomico**—electrical work on bridge over Nanticoke River at Sharpstown, Phillips Brothers, Salisbury, \$2625. 7-7

**Md.** Baltimore—Board of Awards opens bids July 27 for grading, curbing and paving with cement conc. on streets in Contr. 629; George Cobb, Highways Engr.

**Md.** Baltimore—Board of Estimates approved paving at total cost of \$16,000 on Anthony and Umatilla avenues, Castle, Clarkson, Eager, Newkirk, Proctor, Regester and Vincent streets.

**Md.** Baltimore—City, George Cobb, Highways Engr., has low bid of \$14,037 from Arundel Construction Co., 910 Trinity St., for 9,750 sq. yd. cement conc., Cont. 628. 7-7

**Miss.** Corinth—City, W. L. Swift, Mayor, plans conferring with Alcorn County Supvrs. with view to paving 13 blocks Seventh St.

**Miss.** Greenville—City Council may conc. DeLesseps St., between Washington Ave. and Main St.; Frank Hall, City Engr.

**MISSOURI**—State Highway Comsn., T. H. Cutler, Ch. Engr., Jefferson City, opens bids July 29 for projects, estimated to cost \$1,500,000, in 33 counties, involving 9,421 mi. oil gravel, 101,049 mi. graded earth, 14,652 mi. gravel or shale, 12,171 mi. crushed stone, 51,517 mi. gravel, 18,046 mi. oiling, 54,838 mi. oil mat, 2,111 mi. concrete and asphalt, 58,100 mi. gravel haul and 4 separate bridge projects, as well as a number of bridges included with road projects.

**Mo.** Cape Girardeau—Cape Special Road District, W. F. Suedekum, Clerk, opens bids for furnishing and applying oil mat on fol-

lowing roads: Bend Road, 1.3 miles; Country Club Road, 0.90 mile; North Sprigg Street Road, 0.25 mile; Perryville Road, 0.60 mile, and Gordonville Road, 0.55 mile, specifications, D. M. Spivally, Engr., for the District, 523A Broadway.

**Mo.** Cape Girardeau—City Council considering conc. pavement on Mason St., Main to Chestnut St.; Chestnut St., Mason to Sloan's Creek bridge; Bend Road, from Sloan's Creek bridge to northern city limits.

**Mo.** Springfield—Springfield Special Road Dist., E. E. McJimsey, complete Lakes Drive.

**Mo.** St. Joseph—City, W. E. Sullivan, Pres. Board of Public Works, considering conc. sidewalks along Pendleton St.

**N. C.** Asheville—City, R. W. Rigsby, City Mgr., plans further widening Patton Ave.

**OKLAHOMA**—State Highway Comsn., Sam R. Hawks, Chmn., Oklahoma City, has apparent low bids for projects in following counties:

**Beaver**—6.9 mi. grade and drain, Hwy. 35, A. L. Cook, Ottawa, Kan., \$25,320; 4 bridges, W. S. Potter, Beaver City, \$14,207; 6.8 mi. grade and drain same road, A. L. Cook, \$18,322; 4 bridges, Mims and Frost, \$25,633;

**Beckham**—2661 ft. of paving, U. S. Hwy. 66 in Elk City, R. R. Tway, Oklahoma City, \$12,956;

**Harper**—6.3 mi. grade and drain, Hwy. 35, Guy James, Beaver City, \$19,424; 3 bridges, same road, Mims and Frost, Hydro, \$7289;

**Lincoln**—bridge repairs Hwy. 61, near Meeker, B. N. Taliaferro, Madill, \$9279;

**Ottawa**—4.6 mi. grade and drain, U. S. Hwy. 66, Harrison Engineering and Construction Corp., Fairfax Bldg., Kansas City, \$10,689; paving same road, Ryan and Richards, Oklahoma City, \$67,664; 2 bridges, same road, W. L. James, Ada, \$5491; 5 mi. grade and drain, same road, Harrison Engineering Corp., \$15,083; paving same road, Ryan and Richards, \$74,007; 2 bridges, same section, R. R. Tway, 237 E. 15th St., Oklahoma City, \$16,923;

**Pawnee**—5.8 mi. roadway, U. S. Hwy. 64, J. H. Maxwell, Tulsa, \$55,303; bridge on same road, John S. Corley, Oklahoma City, \$3081; 5.6 mi. grade Hwy. 48, J. H. Maxwell, \$30,349; paving same road, Ellis and Lewis, Muskogee, \$98,038;

**Roger Mills**—5 mi. grade and drain, U. S. 283, Pharoah & Co., Henryetta, \$19,077; bridge on same road, Pharoah & Co., \$1585.

**OKLAHOMA**—State Highway Comsn., Sam R. Hawks, Chmn., Oklahoma City, opens bids Aug. 2 for project in following counties:

**Caddo-Canadian**—1.679 mi. grading, drainage and 20-ft., 10-7-10-in. rein. conc. pavement and one bridge; Sec. H. roadway, 140,027 cu. yd. excav., 338.02 cu. yd. A conc., 35,132 lb. rein. steel, 19,630 sq. yd. R.C. pavement, 7008 lin. ft. lip curb, 342 lin. ft. 12-in. corr. iron pipe, 148 lin. ft. R. C. pipe, 7320 lin. ft. wire cable guard rail; Sec. H. bridge, 386.6 cu. yd. rock excav., 5618 cu. yd. conc., 604,200 lb. rein. steel, 153 lin. ft. R. C. handrail, 5,986,000 lb. struc. steel, 38,000 lb. steel expansion plates, 1540 lin. ft. untreated timber piles; two alternates.

**Okla.** Tulsa—Tulsa County, W. O. Bohnefeld, Commr., may construct highway connecting Garden City with 21st St. bridge.

**Tex.** Marshall—City considering paving North A.amo and Perry and Henley Drive.

**Tex.** Pampa—Gray County Commrs. plan paving McLean-Pampa Hwy.; contractor to accept road bonds.

**VIRGINIA**—Department of Highways, Richmond, has low bids approximating \$180,000 for projects in following counties:

**Craig**—3.59 mi. gravel, east and west of Craig Creek, Route 22, Hobbs-Peabody Construction Co., Charlotte, N. C., \$10,355;

**Augusta**—4.9 mi. macadam, Route 33 and S12, Rockingham County line south, R. W. Moore & Co., Staunton, \$88,270;

**Culpeper**—5.9 mi. macadam, Route 32, Barndy Station to east city limits of Culpeper, G. P. Clay, Richmond, \$64,084; alternate, Rhoades and Walters, Culpeper, \$36,101;

**Hanover**—.74 mi. soil, Route 420, near

South Anna River, (City Building Corp., Builders Bldg., Richmond, \$12,928;

**Charles City**—1 mi. soil, Route 435, between James River and intersection with Route 41, Kirkman Brothers, Inc., Mount Airy, N. C., \$3862;

**Prince George**—.65 mi. soil, Route 435, Hopewell airport to James River, City Building Corp., \$3405. 7-7

**VIRGINIA**—Dept. of Highways, Richmond, opens bids July 26 for projects in following county:

**Frederick**—4 mi. macadam, Route 33, south of Winchester, F675E; 4.7 mi. macadam, Route 33, south from Winchester, F675F.

Va., Salem—City plans rebuilding High St. and Clay St.

#### Contracts Awarded

**GEORGIA**—State Highway Board, Atlanta, let contract for project in following county:

**Chattooga**—14.2 mi. asphalt surfacing, Rome-Lafayette Road, 991-AC&C and 905-AC&E, Sam E. Finley, 292 North Ave., N. W., Atlanta, \$45,611. 6-23

**KENTUCKY**—State Highway Dept., Frankfort, let contracts for projects in following counties:

**Clark**—5.044 mi. grade and drain, Winchester-Irvine Road, SP 185 B-G, Codell Construction Co., Winchester, \$27,724;

**Ettil**—4.730 mi. grade and drain, Irvine-Winchester Road, SP 185 B-G, E. A. Chilton & Co., London, \$48,582;

**Perry**—1.504 mi. grade and drain, Chavies-Buckhorn Road, FR 65 B-G, H. H. Miller Construction Co., Jackson, \$23,316;

**Pulaski**—10.202 mi. grade and drain, Somerset-London Road, FA 195 B-G, Lewis & Kelly Construction Co., Harlan, \$56,000;

**Shelby**—3.851 mi. grade and drain, Cropper-New Castle Road, via Elmburg, SP 160 C-G, Southeastern Construction Co., Eminence, \$16,458. 6-30

**Md., Baltimore**—City, George Cobb, Highways Engr., let following contracts: Arundel Construction Co., 910 Trinity St., Cont. 627, 12,400 sq. yd. cement conc., \$19,184; Harry T. Campbell Sons, Towson, Cont. 623, 14,800 sq. yd. cement conc., \$30,129; A. Pesaro & Co., Lanvale & Dickinson St., Cont. 626 12,700 sq. yd. cement conc., \$18,531. 6-23 and 7-7

#### Sewer Construction

**Ky., Louisville**—Comms. of Sewerage, Woolsey M. Kaye, Engr., plans opening bids Aug. 15, work to start Sept. 15, on constructing another section of Southwestern Outfall Sewer, from Cane Run Rd. to point west of Dixie Highway; cost \$1,000,000.

**La., New Orleans**—Sewerage and Water Bd. let contract to Lasker Boiler & Engineering Corp., represented by Woodward Wight & Co., New Orleans, for furnishing boiler for Jefferson-Plaquemines Station, Contr. 127-D.

**Md., Baltimore**—City, Dept. of Public Works, Bureau of Sewers, receives bids July 27 for sewer, Sanitary Cont. 282.

**Md., Baltimore**—City, Dept. of Public Works, Bureau of Sewers, receives bids July 27 for sewer, Sanitary Cont. 282.

**Md., Baltimore**—Gray Concrete Co., Duncan Lane, low bidder for rein. conc. pipe, Material Contract No. 90. 7-7

**Md., Hagerstown**—J. B. Ferguson Co., 39 W. Franklin St., Hagerstown, low bidder sewage treatment works addition. 7-7

**Mo., St. Louis**—Skrainka Construction Co., 805 Security Bldg., has contract for constructing conc. lining, open sewer, Cold Water Creek, St. Louis Municipal Airport. See Want Section—Machinery and Supplies.

**Okl., Oklahoma City**—City, L. M. Bush, City Engr., plans 18,000 ft. of sanitary sewer, South Villa Ave.

**Tex., Tyler**—City, L. H. Powell, City Mgr., will readvertise for bids for \$85,000 sewerage disposal plant; H. L. Thackwell, Engr., Jacksonville. 6-16

#### Telephones and Radio

**W. Va., Oak Hill**—Webster Springs Telephone Co., capital \$15,000, incorporated; W.

A. Stanley, Beckley; H. H. O'Neal, Oak Hill.

#### Textile Mills

**Ala., Anniston**—Coosa Textile Co., Andrew Stoltz, establishing hosiery mill in Britton Bldg., Wilmer Ave.; install 30 seamless hosiery machines.

**Ala., Anniston**—A. K. Adams & Co., Engrs.-Bldrs., 542 Plum St., Atlanta, Ga., advises work will start on addition to American Net & Twine Co.'s plant in about 3 weeks; complete plans will not be available until then; work consists of second story addition to No. 1 mill, approximately 107x80 ft., using steel floor beams at second floor and wood timbers at the roof, spline plank, intermediate and maple floors on second floor, spline plank with tar and gravel roofing at roof; toilet tower with 5 fixtures; metal toilet partitions and tile floors; mill brick wall construction with either wood windows or steel sash (not decided); necessary additions to heating, plumbing, sprinkler and electric systems; also 1 story addition to dye house, approximately 53x85 ft.; brick walls, wood trusses making clear span of building, monitor full length with wood sash; conc. floors. 7-14

**La., New Orleans**—Geo. J. Glover Co., Whitney Bldg., erecting mill building for Lane Cotton Mills Co.; found. about complete; some brick work started; 2 stories, 300x180 ft.; Favrot & Livaudais, Ltd., Nola Bldg., Architects. 6-23

**N. C., Rocky Mount**—W. H. Draper & Co. construct 80x100 ft. addition to cordage plant; D. J. Rose & Sons, Rocky Mount, Contr.; install machinery from main plant at Troy, N. Y.; Thomas J. Pearsall, Company Director.

**Tex., Houston**—Houston Textile Co., capital \$350,000, incorporated; D. Summers, 1004 Jackson Blvd.

**Va., Lynchburg**—Virginia Textile Corp., Frank Hughes, Passaic, N. J., reported, plans increasing output of plant; install additional machinery.

**W. Va., Clarksburg**—Ronald Hosiery Co. incorporated; Leon Luxenburg, Osseola Mills, Pa.; Emma J. Aman, 117 W. Main St., Clarksburg.

#### Water Works

**Ala., Phenix City**—Alabama Public Service Comsn., Montgomery, approved sale by Alabama Water Service Co., of its water works properties in old Girard section of Phenix city to the city of Phenix City.

**La., Oakdale**—Layne-Louisiana Co., Lake Charles, reported, has contract for sinking deep well for city water works.

**Md., Baltimore**—City, Dept. of Public Works, Bureau of Water Supply, Municipal Bldg., receives bids July 27 for storage bins, Mt. Royal Station.

**Mo., Kirkwood**—City, Jos. N. Wilson, City Engr., received low bid from Pittsburgh-Des Moines Steel Co., Des Moines, Iowa, at \$39,257, for extension to water system; work includes 2 filters, 14x15 ft.; coagulation basin, 59x119 ft., capacity 633,000 gal.; clear water reservoir, capacity 33,000 gal.; new intake and chemical storage room; install centrifugal pump 12 in. double suction 10 in. discharge and 8-in. double suction 6-in. discharge; 624 ft. of 12-in., 24 ft. of 6-in. Class A, c. i. pipe; 144 ft. of 8-in. and 12 ft. 6-in. c. i. pipe, Class D. 6-30

**W. Va., Charleston**—West Virginia Water Service Co., 183 Summers St., H. M. Cogan, Local Mgr., advises plans not definitely decided regarding intake at Coonskin Pool on Elk River; have started excavation for pumping station, work by local contractor; will probably install an under river crossing, after permission is granted by Army Engrs. 6-23

#### FIRE DAMAGE

**Ala., Birmingham**—Concrete Steel Co.'s plant, 1009 Fifth Ave., S.

**Ala., Talladega**—Southern Railway freight platform and depot; loss \$15,000.

**Ark., Blytheville**—King Matthews Packing Co.'s warehouse; loss \$10,000.

**Ark., Conway**—Canning plant, owned by Fred Hart, Seymour, Mo.

**Ga., Macon**—Dwelling of John H. Sherwood, Wesleyan Drive, Rivoli; loss \$25,000.

**Ga., Rome**—Home of Jos. Miller on Oakwood Drive, West Rome.

**Ga., Swainsboro**—Swainsboro Lumber Co.'s sawmill, owned by J. A. Coleman, New River, near Hardeeville, S. C., loss \$8000.

**Ga., Thomasville**—Turpentine still owned by George Mills on Thomasville-Monticello, Fla., highway.

**Ky., Paintsville**—Warehouse of Mountain Furniture Co.; loss \$40,000.

**La., Alexandria**—Dwelling of S. F. Baker, on Military Highway; loss \$12,000.

**La., Belcher**—Dwelling of E. D. Gleason.

**Md., Baltimore**—3 piers destroyed and 1 damaged on Clinton St. owned by Pennsylvania Railroad Co.; loss \$600,000.

**Md., Cumberland**—Plant of Cover Lumber Co., owned by Mrs. Bertha Cover; loss \$25,000.

**Miss., Columbia**—Whitebuff consolidated school, in First Consolidated School District of Marion County.

**Miss., Natchez**—Hlangolen, summer home of W. S. K. Beane, owned by Britton & Koontz Natl. Bank.

**Mo., St. Louis**—Century Woodworking Co.'s plant, 213 N. Market St.; loss \$15,000.

**N. C., Concord**—Linker Chair & Table Co.'s plant on Harris St.

**N. C., Greensboro**—Orisson Bldg., 306 S. Elm St., and W. Grand Silver Store, 300-02 S. Elm St., Burtner Furniture Co., 312 S. Elm St.; loss \$200,000.

**N. C., Kinston**—Dwelling of John G. Cox; loss \$10,000.

**N. C., Leaksville**—Store of Alex R. Williams on Madison-Stoneville Rd.

**Okl., Oklahoma City**—Upper stories of 4-story Plansifter Milling Co.

**Okl., Tulsa**—Home Bedding Co.'s plant, 2615 E. Ute St., operated by H. K. Drake, 2601 E. Ute St.

**S. C., Woodruff**—J. N. Boyce Jewelry Store and Woodruff Theatre, building owned by Blanche Westmoreland.

**Tex., Corsicana**—Dairy and hay barn at I. O. O. F. Widows' and Orphans' Home, 3 miles west of here; loss \$15,000.

**Tex., Dallas**—Box factory of Higginbotham-Bailey-Logan Co., 600 block S. Lamar St., south of Young, S. Dallas; loss \$10,000.

**Tex., Galveston**—Davidson's Department Store, 2327 C St.; loss \$75,000.

**Tex., Laredo**—Ranch home and barn of V. L. Puig, Webb County.

**W. Va., Davy**—Buildings owned by Sam Chambers and S. M. Burgess, occupied by Chambers Garage and Burgess Hardware Co.; loss \$50,000.

**W. Va., Welch**—St. Peter's Catholic Church, Father J. J. Hanley, Rector.

**W. Va., Welch**—St. Peter's Catholic Church, Maple Ave.

#### Westinghouse Pays Dividend

Directors of Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., declared the regular quarterly dividend of 87½ cents a share on preferred stock and omitted the quarterly dividend of 25 cents on common stock. The opinion of the directors was that, in view of the earnings situation of the company, cash resources should be conserved and surplus should not be further reduced by the payment of dividends on common stock. The company has no outstanding bonds or bank loans and is in a sound financial condition as to cash and net quick assets, it is announced.



# BUILDING NEWS

## BUILDINGS PROPOSED

### Association and Fraternal

Ga., Valdosta—A. F. & A. Masons plan erecting Masonic temple on Valley St.

### Bank and Office

D. C., Washington—Metropolis Bldg. Assn., Pennsylvania Ave. and 2nd St., S. E., has plans in progress by Pierson & Wilson, Archts., 1341 Connecticut Ave. for alterations to bank; conc. floor; steel interior; tile and marble; ornamental iron and bronze.

Md., Baltimore—Union Trust Co., Charles & Fayette St., has plans in progress by Benjamin Frank, 517 N. Charles St., Archt., and Smith & May, Baltimore Trust Bldg., Asso. Archt., for bank Eastern Ave. & Conkling St.

### Churches

Ky., Catlettsburg—Catlettsburg Missionary Baptist Church, W. C. Pierce, Pastor, advises will not at this time erect proposed church. 6-30

Miss., Gulfport—Catholic Church, Rev. Mulroney, Biloxi, acquired site 100x142 ft., 19th St. between 35th and 36th Ave.; erect church.

Va., Winchester—Seventh Day Adventists erect church in Parkway.

### City and County

Ala., Jasper—Walker County Bd. of Comrs., erecting courthouse. Following have contracts: Foster & Creighton, American Natl. Bank Bldg., Nashville, Tenn., and Protective Life Bldg., Birmingham, Gen. Contr.; Jilett and Harell, Jasper, contract for plumbing and heating; Ball & Dyer Electric Co., Inc., 905 S. 22nd St., for wiring; Southern Steel Works, 908 2nd St., W., for struc. steel; Connors Steel Co., Empire Bldg., for rein. steel; Birmingham Ornamental Iron Co., 417 W. Pinson St., ornamental iron; Hawkins & Israel Co., Inc., 2530 7th Ave., S., for painting; Birmingham Furnace & Roofing Co., 825 7th Ave., S., roofing; Federal-American Cement Tile Co., 2231 27th Ave., N., precast roof; Truscon Steel Co., 513 N. 21st St., metal windows; all Birmingham; Russellville Cut Stone Co., Russellville, limestone; Huttig Sash & Door Co., 1200 S. Vandeventer St., St. Louis, Mo., millwork. Charles H. McCauley, Archt., Jackson Bldg. 7-14

La., Colfax—Grant Parish Police Jury, Courthouse Bldg., receives bids Aug. 8 for repairs to jail building; plans and specifications from J. N. Warner, Sec. Police Jury.

Md., Baltimore—City, Park Bd., will expend \$20,000 for repairing seats at Baltimore Stadium.

Md., Baltimore—Alphonse Custodis Chimney Constr. Co., 119 E. Lombard St., low bidder for jail alteration and new stack. 7-7

S. C., Charleston—City has plans by David Hyer, Archt., for alterations and additions to jail; conc. found., brick walls, comp. roof; cost \$15,000.

W. Va., Chesapeake—City, Hugh Gillen, Mayor, plans voting on bonds for erecting municipal building, to contain offices, jail and fire equipment.

### Dwellings

Ala., Eufaula—S. A. Bulloch, Eufaula St., care of Eufaula Hardware Co., Owner, receives bids July 27 for residence; 2-stories and basement; 88x47 ft.; 12-rooms; 2 baths; conc. found.; brick and clapboard walls; c. i. columns; tile and hardwood floors; Alabama marble hearth finish; steel basement sash; metal lath; sprinkler for garage; T. Firth Lockwood, Archt., 211 Murrah Bldg., Columbus, Ga. Following estimating: Williams Lumber Co., Columbus, Ga.; W. P. James, Eufaula; W. H. Brown, Dothan. 6-23

Fla., Chipley—C. L. Jinks, Florida Packing Co., erecting residence on N. Sixth St.

Fla., Miami Beach—Palmetto Homes Corp.,

erect residence and garage 1673 Jefferson Ave., Carlos B. Schoeppl, Archt., 528 Lincoln Rd., Harry Sayle, Contr., 1758 S. W. 23rd St.

Fla., Miami Beach—G. Allen Hudsch, 130 W. 228 St., New York, revising plans for residence and garage Apache Ave. and Flamingo Waterway; Russell T. Pancoast, Archt., Lincoln Rd.

Fla., Miami Beach—Carl Green, 1409 Alhambra Circle, Coral Gables and Miami Beach contemplates erecting residence N. Bay Road, Miami Beach; preliminary plans by Lester Avery.

Fla., Miami Beach—Carlos B. Schoeppl, 528 Lincoln Rd., has plans in progress for \$25,000 residence and gate lodge Flamingo Drive facing Indian Creek.

Fla., Miami Beach—Palmetto Homes Corp., John B. Reid, 12th St., reported, erect dwelling 1600 block Jefferson Ave.; rein. conc.; conc. block; stucco; H. H. Sayles, 1150 Collins Ave., will probably receive contract; Carlos B. Schoeppl, Archt., 528 Lincoln Rd.

Fla., Miami Beach—Wilbert Harborn, 4555 Meridian Ave., Miami Beach, and Coral Gables, erect residence and garage, 52nd St. and Pine Tree Drive; Lester Avery, 36 S. W. 10th Ave., Miami, Archt.

Fla., Winter Park—R. B. Barbour erect 12-room Spanish type dwelling on N. New England Ave.; install modern system of washed air cooling and heating plant; will use Z-M-A treated lumber; James Gamble Rogers, Designer.

Ga., Macon—John H. Sherwood, Wesleyan Drive, Rivoli, plans rebuilding dwelling burned at loss of \$25,000.

Md., Baltimore—Louis Cordish, 2206 Mondawmin Ave., alter apartment 2437 Reisterstown Rd.; 2 story; brick; Abr. Finkelstein, Archt., Equitable Bldg.

Md., Baltimore—Frank Macey, 5001 Midwood Ave., filed plans with Bureau of Buildings for 2 story brick dwelling and garage, 304 St. Dunstan's Rd., Homeland.

Md., Baltimore—Wrenn Lewis, Westenhaven & Jencks, 113 W. Mulberry St., Archts., preparing plans for residence alterations, Roland Park; 2½ stories; brick.

Md., Baltimore—Kenneth C. Miller, 203 Davis St., Archt., preparing plans for residence, Edmonds Ave. near city; 2½ stories, frame, 34x44 ft.

Md., Catonsville—Linthicum Realty Co., Seth Linthicum, 20 E. Lexington St., Baltimore, soon receive bids for duplex residence, Catonsville; Bernard Evander, 20 E. Lexington St., Baltimore, Archt.

Md., Hagerstown—M. P. Moller, Jr., remodeling residence; general interior and exterior alterations; Edw. H. Glidden, Archt., Baltimore Life Bldg., Baltimore.

Tex., Dallas—Stuart Moore, 1057 Kessler Blvd., erect 11-room brick, veneer dwelling, garage, and servant room; cost \$13,000.

Tex., Dallas—Alex Weisberg, Republic Bank Bldg., Chrm. City Park Comsn., erect \$37,500 dwelling Turtle Creek Blvd. in University Park; 2 stories; Herbert M. Greene, LaRoche & Dahl, Archts.

Va., Norfolk—F. J. Gannaway, has permit for residence 7160 N. Shore Rd.; cost \$10,500.

### Government and State

Ala., Athens—Prospective estimators on post office, bids Aug. 5 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., are: Foster & Creighton Co., Nashville, Tenn.; Norwood-Griffin Co., 847 Boulevard Circle, Atlanta; Southeastern Construction Co., 210 W. Second St., Charlotte, N. C. 6-30

D. C., Washington—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., rejected bids for cafeteria for Department of Agriculture extensible building.

Fla., Daytona Beach—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., may revise plans for post office, for which Algernon Blair, First Nat. Bank Bldg., Montgomery, Ala., submitted low bid of \$212,690. 7-14

Fla., Fort Lauderdale—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., has plans nearing completion for \$175,000 post office; Robert L. Weed, Archt., 2620 Biscayne Blvd., Miami.

Ga., Atlanta—Prospective estimators on post office lighting fixtures, bids July 22 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., are: Perfectelite Co., 1457 E. 40th St., Cleveland, Ohio; Reading Chandelier Works, 503 Penn St., Reading, Pa.

Ky., Lexington—Following prospective estimators on post office, bids Aug. 4 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.:

General—James C. Miller, Campbellsville, Ky.; Wortham Construction Co., Starks Bldg., Louisville; Hector F. J. Estrup, Elizabethtown, N. Y.; H. W. Cord Co., 1003 K St., N. W., Washington, D. C.; Penker Construction Co., 1030 Summer St., Cincinnati; Algernon Blair, First Natl. Bank Bldg., Montgomery, Ala.;

Elevators—Wm. A. Miller Elevator & Machine Co., 920 N. Main St., St. Louis; S. Heller Elevator Co., Milwaukee; Gurney Elevator Co., Southern Bldg., Washington, D. C., and 109 W. 64th St., New York; Atlantic Elevator Co., Erie Ave. and D St., Philadelphia; Graves Elevator Co., Box 56, Rochester, N. Y.; Elevator Supplies Co., 1515 Willow Ave., Hoboken, N. J.; American Elevator & Machine Co., 500 E. Main St., Louisville; General Electric Co., Schenectady, N. Y.; Westinghouse Electric Elevator Co., 30th and Walnut Sts., Philadelphia; Otis Elevator Co., 810 18th St., N. W.; A. B. See Elevator Co., 1343 H St., N. W.; Houghton Elevator Co., 1103 Vermont Ave., all three Washington, D. C. 7-7

La., Monroe—Following prospective estimators on post office, bids Aug. 10 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.: Adams Construction Co., Woodward Bldg., Washington, D. C.; C. H. Westcott, 624 Bernhardt Bldg., Monroe, La.; W. Murray Werner, Box 908, Monroe, La.; Charles H. Westcott, 624 Bernhardt Bldg., Monroe. 7-7

MARYLAND—General Construction Loan bonds totaling \$3,076,000 to be sold Aug. 10 includes following amounts for construction at state buildings: New Prison, \$400,000; Maryland Penitentiary, \$25,000; House of Correction, \$75,000; Memorial commemorating founding of Maryland, \$35,000; Pulaski Memorial, \$15,000; fire protection in State institutions, \$110,000; State military department, \$178,000.

Miss., Jackson—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids Aug. 4 for elevators for post office, bids for construction of which will be received on same date. 6-23

Miss., Jackson—Following prospective estimators on post office, bids Aug. 4 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.:

General—Walbridge, Aldinger & Co., 409 Griswold St.; M. T. Reed Bk., both Detroit; Kaiser-Ducette Co., Construction Co., Belzoni, Miss.; M. H. Sobel Co., First Nat. Rialto Square Bldg., Joliet, Ill.; R. F. Wilson & Co., 1841 Elston Ave., Chicago; Nathan Wohlfeld, Construction Indus. Bldg., Dallas, Tex.; Landis & Young, Box 244, Georgetown, Tex.; Batson-Cook Co., West Point, Ga.; James McWilliams, 19 E. 47th St.; Prescott-White Corp., 118 E. 28th St., both New York; United Construction Co., Georgia Savings Bank Bldg.; J. S. McCauley, Bona Allen Bldg., both Atlanta; Samford Brothers, 301 Washington Ave., Montgomery, Ala.; Vincent Chiabai & Co., 4360 Washington St., Gary, Ind.; Spence Brothers, 201 Brewer Arcade, Saginaw, Mich.; Penker Construction Co., 1030 Summit St., Cincinnati.

N. C., Durham—Following prospective es-



timators on post office, bids Aug. 9 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.; Southeastern Construction Co., 210 W. Second St., Charlotte, N. C.; Adams Construction Co., Woodward Bldg., Washington, D. C.; Fiske-Carter Construction Co., Spartanburg, S. C.; Grahn Construction Co., Red Rock Bldg., Atlanta, Ga. 6-30

N. C., New Bern—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, appointed Robert F. Smallwood as architect to design Federal building.

Okl., Ada—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., reported, call bids at once on \$25,000 post office; 2 stories and basement, brick, stone and conc.; William T. Schmitt, Archt. 6-9

Okl., El Reno—Department of Justice, Bureau of Prisons, Washington, D. C., opens bids July 25 for 200,000-gal. tank and tower, Southwestern Reformatory.

Okl., Ponca City—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, reported, start work by Aug. 15 on \$250,000 post office and court house; 1 and 2 stories, 100x150 ft., brick, stone, steel and rein. conc.; John Forsyth, Exchange Bank Bldg., and Donald McCormick, 1242 S. Boston St., both Tulsa, Asso. Archts. 4-14

Okl., Stillwater—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, reported, have plans ready by Sept. 1 for \$135,000 post office; R. W. Shaw, Archt., Enid.

Tex., Randolph Field—Constructing Quartermaster has low bid of \$7,690 from Martin Wright Electric Co., 1001 Navarro St., San Antonio, for insulation and cooling system.

Virginia—State of Virginia, Major Rice M. Youell, Supt., of Penitentiary, construct road camp for 50 to 60 prisoners.

Va., Danville—Following prospective estimators on post office, bids opened July 29 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.:

**General**—Adams Construction Co., Woodward Bldg.; Percy H. Keller, Shoreham Bldg.; H. W. Cord Co., 1003 K St., N. W., all three Washington; Henry L. Mans & Sons, 524 Arlington Ave.; Engineering Contracting Co., 504½ St. Paul St., both Baltimore; A. W. Kutsche & Co., 2111 Woodward Ave.; Walbridge-Aldinger Co., 409 Griswold St.; Culbertson & Kelly Co., 827 Milwaukee Ave., all three Detroit, Mich.; Kaiser-Ducett Co., Rialto Square Bldg., Joliet, Ill.; John M. Geary Co., Box 1253, Asheville, N. C.; R. M. Gordon, 440 S. Franklin St., Decatur, Ill.; Ralph S. Herzog, 10 S. 18th St., Philadelphia; James McWilliams, 19 E. 47th St.; Prescott-White Corp., 118 E. 28th St., both New York; United Construction Co., Georgia Savings Bank Bldg., Atlanta; Virginia Engineering Co., First Nat. Bank Bldg., Newport News, Va.; R. K. Stewart & Son, High Point, N. C.

**Elevators**—Haughton Elevator Co., Vermont Bldg.; Otis Elevator Co., 810 18th St.; A. B. See Elevator Co., 1343 H St., N. W., all Washington; Wm. A. Miller Elevator & Machine Co., 920 N. Main St., St. Louis; Atlantic Elevator Co., Erie Ave. and D St., Philadelphia; Elevator Supplies Co., 1515 Willow Ave., Hoboken, N. J.; American Elevator & Machine Co., 500 E. Main St., Louisville, Ky.; General Electric Co., Schenectady, N. Y.; Westinghouse Electric Elevator Co., 30th and Walnut Sts., Philadelphia; Elevator Locks Co., 119 N. Washington St., Peoria, Ill.; Gurney Elevator Co., 109 W. 64th St., New York, and Southern Bldg., Washington; S. Heller Elevator Co., Milwaukee, Wis.; Westbrook Elevator Manufacturing Co., Danville. 7-14

### Hospitals, Sanitoriums, Etc.

D. C., Washington—Veterans Administration, Construction Service, has low bid of \$12,300 from Martin Brothers, 1341 Connecticut Ave., N. W., for alterations to building, 2650 Wisconsin Ave.; Otis Elevator Co., Washington, low at \$2,700 on elevator. 6-23

D. C., Washington—Department of the Interior opens bids Aug. 16 for male receiving building at St. Elizabeths Hospital; 258

ft. 4 in. x 188 ft. 4 in., 5 stories, rein. conc. brick and tile; tile roof; work includes excavating, rein. conc., hollow tile, brick work, cut stone work, granite, architectural terra cotta, marble work, floor and wall tile, terrazzo floors, linoleum floors, miscellaneous, struc. and ornamental metal work, steel sash, steel stairs, tile metal and built-up roofing, metal lathing, plastering, carpentry, laundry chutes, metal weather strips, insect screens, window shades, painting, glazing, hardware, plumbing, heating and ventilating, electrical work, and outside service connections; plans by Veterans Administration. 7-14

Fla., Lake City—Veterans Administration, Construction Division, Washington, D. C., plans hospital improvements.

Ga., Sparta—Dr. Roger Swint, Supt. Georgia State Hospital, Milledgeville, reported, considering removal of mentally defective children's unit to buildings of Tenth District A. & M. School

Ky., Louisville—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, opens bids Aug. 11 for lighting fixtures for Marine Hospital. 6-9

**MARYLAND**—General Construction Loan bonds totaling \$3,076,000 to be sold Aug. 10 include following amounts for construction at State hospitals: Springfield State Hospital, \$98,000; Spring Grove State Hospital, \$219,000; Crownsville State Hospital, \$368,000.

Md., Baltimore—City, Bureau of Mechanical Electrical Service, has low bid of \$7,498 from Enterprise Electric Co., 4 W. Barre St., for electric system improvements, City Hospitals, Eastern Ave.

Md., Baltimore—Child's Nursery and Hospital, Franklin and Schroeder Sts., having plans prepared by O. Eugene Adams, 329 N. Charles St., for 2 and 3 story, brick hospital and nursery; site not selected.

Md., Catonsville—Spring Grove State Hospital, Dr. Robert E. Garrett, Supt., opens bids July 22 for infirmary; Henry Powell Hopkins, Archt., 10 E. Mulberry St.; Dr. George H. Preston, Chmn. State Board of Mental Hygiene, Baltimore. 7-14

Md., Buena Vista—District Commrs., Washington, D. C., have low bid from H. W. Cord Co., Washington, for water supply and sewage disposal plant, Children's Tubercularis Sanatorium.

S. C., State Park—State Hospital Association having plans completed by Wessinger & Stork, Arcade Bldg., Columbia, for community building and auditorium. 7-7

### Hotels and Apartments

Fla., Miami—Mrs. Williamson, 860 Collins Ave., or 1415 Meridian Ave., reported, plans erecting 2 or 3-story hotel; 45x130 ft.; B. Kingston Hall, Archt., 135 6th St.; work will probably be handled by Clayton E. Shappell, Contr., Miami Beach.

La., New Orleans—R. P. Luccioni & Co., 2101 Orleans St. low bidder for erecting 2 story, 3-apartment, 722 Dumaine St. for Miss Mamie Paterno; Wm. E. Spink, Archt., Pere Marquette Bldg. 6-30

Md., Baltimore—J. E. Norris, 722 McCabe Ave., has contract for alterations to apartment 2910 N. Calvert St. for Annie Clark, 2742 N. Charles St.

### Miscellaneous

Fla., Miami—United Greyhound Racing Assn., J. H. Adams, Pres., contemplates erecting clubhouse and making improvements to Biscayne Kennel Club; Paist & Steward, Ingraham Bldg., Archt.; contract will probably be let to George Langford Construction Co., McAllister Hotel.

### Schools

Ala., Orrville—Dallas County Board of Education, J. A. Lee, Supt., Selma, opens bids July 26 for 8-1-B school building. 6-30

Ga., Atlanta—Fulton County Board of Education, Jere Wells, Supt., has plans about completed for 7-room College Park School; brick veneer, comp. roof; Harrelson Bleckley, Archt., 512 Bona Allen Bldg. 6-16

La., Arabi—St. Bernard Parish School Board opens bids Aug. 9 for additions and alterations to Meraux school; Wm. R. Burk, Archt., 416 Balter Bldg., New Orleans; prospective estimators include: Wm. Wallace, Pere Marquette Bldg.; H. W. Bond & Bro., 816 Howard Ave.; T. A. Pittman, Inc., Canal Bank Bldg.; Caldwell Brothers, 816 Howard Ave.

**MARYLAND**—General Construction Loan bonds totaling \$3,076,000 to be sold Aug. 10 include following amounts for construction at various schools: Frostburg Normal School, \$32,000; Towson Normal School, \$130,700; Salisbury Normal School, \$100,000; Maryland Training School for Boys, \$50,000; Montrose Training School for Girls, \$40,000; Rosewood State Training School; University of Maryland, College Park, \$120,000.

Maryland—Maryland School for Colored Girls, Dr. Geo. G. Finney, Chmn., 3119 St. Paul St., having plans prepared by Henry Powell Hopkins, 10 E. Mulberry St., for \$150,000 training school involving 3 cottages.

Md., Baltimore—City, Public Improvement Comsn., H. J. Leimbach, Supvg. Engr., to take bids this summer on 8-room school, Mosher and Wilson Sts.; 2 story, brick; A. C. Radziszewski, Archt., 425 S. Ellwood Ave.; Kubitz & Koenig, Struc. Engrs., Emerson Tower Bldg.; Reeder, Elser & Aikers, Mech. Engrs., 916 N. Charles St.

Md., Baltimore—Calvert School, 105 Tuscany Road, erect gymnasium; 52.8x82.8 ft., stone and stucco; L. L. Chambers, Inc., Contr., 36th St. & Roland Ave.; Laurence Hall Fowler, Archt., 347 N. Charles St.

Md., Baltimore—School Commrs., Dept. of Maintenance, have low bid of \$6,700 from Basil B. Wells, 1617 Frederick Rd., for interior painting, east and west wings, Polytechnic Institute.

Md., Baltimore—Public Improvement Comsn., H. J. Leimbach, Supvg. Engr., soon receive bids for addition to Hamilton School No. 236; rein. conc., brick; Clyde N. & Nelson Friz, Archts., 2010 Lexington Bldg.; Reeder, Elser & Aikers, Mech. Engrs., 916 N. Charles St.; Kubitz & Koenig, Struc. Engrs., Emerson Tower Bldg. 6-30

Md., Brooklyn Park—Anne Arundel County School Commrs., George Fox, Sec., Annapolis, may ask for bids about July 27 for school addition; 1 and 2 story, brick; contain gymnasium and classrooms; W. H. Emory, Jr., Baltimore Tr. Bldg., and Buckler & Fenhagen, 325 N. Charles St., Assoc. Archts. 6-30

Md., Rockville—Montgomery County Board of Education plans school for primary grades.

Miss., New Albany—Kiwanis Club interested in erection of gymnasium on high school grounds.

Oklahoma—A. J. Love & Co., Atco Bldg., Tulsa, advise construction of Berryhill School, District 33, Tulsa County, postponed indefinitely.

Okl., Stillwater—State Board of Agriculture, Harry B. Gordell, Pres., Oklahoma City, advises plans have not been made for girls' dormitory at Stillwater; bonds not sold.

S. C., Rock Hill—Winthrop College open bids July 26 for dairy barn; 220 x 60 ft. with 33 x 80-ft. wing, conc. foundations, brick, struc. steel, comp. roof, steel sash, metal doors; A. D. Gilchrist, Archt.

Tex., Austin—Herbert M. Greene, LaRoche & Dahl, Dallas, preparing sketches for \$300,000 practice high school, University of Texas.

Va., Blacksburg—Virginia Polytechnic Institute opens bids July 28 for Davidson Hall; rein. conc., brick, hollow tile; Carneal, Johnson & Wright, Archts., Electric Bldg., Richmond; contractors estimating on revised plans are: North Eastern Construction Co., Nissen Bldg., Winston-Salem, N. C.; John T. Wilson Co., Mutual Bldg.; Claiborne & Taylor, Broad Grace Arcade Bldg.; Doyle & Russell, Central Natl. Bank Bldg., all Richmond; J. F. Barbour & Sons, Franklin Rd., South Roanoke; D. J. Phipps, 212 Main Wassaena, both Roanoke.

## Stores

Ark., Clarksville—Palace Drug Store will occupy portion of building to be erected on site of B. F. Johnson's store, recently burned, 27x100 ft.; 2 stories; tile roof; steel ceiling; 8 offices on second floor.

D. C., Washington—Northeast Amusement Corp., 1200 Sixth St., S. W., has low bid from Ratner Stanhope Co., 415 Lexington Ave., New York, for alterations to store, 1119 H St., near 12th St., for M. H. Fishman Co., 1133 Broadway, New York; excavation, grading, conc. found., struc. steel and iron, tile, marble, terrazzo, metal doors, heating; Clinton Bentzen, Archt., New York City; L. H. Dietrich, 3804 Kansas Ave., N. W., Asso. Archt.

Ga., Atlanta—Eagan Estate has plans by Morgan, Dillon & Lewis, Archts., Grant Bldg., for alterations to store building 67 Broad St., N. W.; 1 story unit; wood partitions; millwork; general interior alterations. Following estimating: Brazell, Miller & Newbanks, Norris Bldg.; Collins, Holdbrook & Collins, Atlanta Trust Co. Bldg.; W. B. Heirs, 1497 Westwood Ave, S. W.

La., Alexandria—Dr. J. A. White erect 52x96 ft., brick and conc. store Murray St. between 4th and 5th; Pure Food Store, Third and Washington Sts., Lessee.

Md., Baltimore—J. O. U. A. M., Wm. W. Linzey, 5629 Greenhill Ave., erect store and lodge building, White Ave. near Belair Rd.; 1-story, brick; Wm. W. Werking, Archt., 4105 Penhurst Ave.

Mo., Kansas City—Theodore Winningham, 434 W. 56th St., and Webster Withers, Jr., Finance Bldg., erect 1 story, 50 x 100 ft. building Main St.; Safeway Stores, Inc., Lessee.

N. C., Charlotte—Sears, Roebuck & Co., Frank Kohn, Local Mgr., remodel store S. Tryon St.

Okla., Oklahoma City—M. P. Simmons, 816 N. Hudson St., erect store, 800 N. Hudson St., to be occupied by Kroger Grocery &

Baking Co.; fireproof, steel, brick and tile, 1 story, 60x100 ft., steel deck, 4 ply tar and gravel roof, rein. conc. foundation; cost of building \$14,000; of equipment, etc., \$10,000; Harden & Co., 500 Block W. Main St., Archt. See Want Section—Building Material and Supplies. 7-14

S. C., Spartanburg—W. T. Grant Co., Harry Williams, Real Estate Dept., 1441 Broadway, New York, receives bids July 25 for constructing store; brick walls; comp. roof; plate glass store front; etc.; C. M. Guest & Sons, Anderson, bidding.

## Theatres

La., Jeanerette — Owen & Southwell, Archts., New Iberia, preparing plans for remodeling 1 story and mezzanine theater building, recently burned, for J. & J. Wormser; white stucco, ornamental iron exterior, marquee and entrance doors finished in aluminum, steel trusses, sheet metal roof, air cooling and steam heating system; seating capacity 560.

S. C., Woodruff—J. N. Boye, reported, will rebuild burned Woodruff Theater.

## Warehouses

Ky., Lexington—Directors of Northern District Warehousing Corp., Carrollton, voted to erect loose leaf tobacco warehouse.

Mo., Caruthersville—Nelson & Woodson, Russellville, Ark., have contract for cotton warehouses at Caruthersville, Mo., and Eloise, Tenn., for Anderson-Clayton Compress Co., Memphis, Tenn.

Tenn., Eloise—See Mo., Caruthersville.

Tex., Sherman—Jones-Hettlesater Construction Co., Mutual Bldg., Kansas City, Mo., reported, has contract for constructing 2-story conc. and brick warehouse and office building on E. Lamar St., for Kimbell-Diamond Milling Co.; cost \$25,000; work in charge of J. H. McDuffie, Sherman; completion in 60 days.

# BUILDING CONTRACTS AWARDED

## City and County

Md., Baltimore—Following submitted low bids for library furniture and equipment for Enoch Pratt Free Library: Wilkinson Equipment Co., 53 S. Whitley, Philadelphia, Pa., at \$32,987, for work furniture and equipment; John C. Knipp & Sons, 343 N. Charles St., Baltimore, at \$5072, for cabinet and other built-in woodwork; General Fireproofing Co., 27 W. Fayette St., Baltimore, at \$27,903, for steel furniture and other steel equipment; Stewart & Co., Baltimore, at \$4542, for special individual upholstery furniture, draperies and lamps; McDowell & Co., Baltimore, at \$2383, for rugs; The Irwin Seating Co., Grand Rapids, Mich., at \$1319, for auditorium chairs; John C. Knipp & Sons, Baltimore, at \$8405, for misc. equipment. 7-7

## Dwellings

D. C., Washington—E. T. Lindner, 5039 Reno Rd., erect dwelling, 7627 16th St., S.; 2 stories, brick, slate and copper roof, hot water heat; cost \$15,000; owner builds.

D. C., Washington—W. C. Houck erect residence, 1718 Otis St., N. W.; 1 story, frame, comp. shingle roof, hot water heat; Sears, Roebuck & Co., Designers; Earl M. Broadhurst, Bldr., Bethesda, Md.

D. C., Washington—L. M. & Jos. A. Herbert, 1013 15th St., erect residence, 1109 Mt. Olivet Rd.; 2 stories, brick, tin roof, hot water heat; cost \$22,000; Geo. T. Santmyers, Archt.; owner builds.

D. C., Washington—J. Edw. Chapman, 37 H St., N. W., erect residence, 3637 Jenifer St.; 2 stories, brick; hot water heat; owner builds.

D. C., Washington—J. E. Douglass Con. Co., 1621 K St., erect residence, 5611 Third St.; 2 stories, brick; hot water heat; owner builds.

D. C., Washington—Dr. George Ellis, 301 Kentucky Ave., S. E., erect residence, 656 E. Capitol St.; 2 stories, brick, hot water heat; cost \$9000; Lee T. Turner, 1366 Perry Place, Bldr.

D. C., Washington—W. F. Frost, has permit for 2½-story masonry dwelling 1375 Locust Drive.

D. C., Washington—Russell W. Langmaid, has permit for 2-story brick, stucco and frame dwelling 5804 Nevada Ave.; cost \$10,000.

D. C., Washington—L. E. Brueninger, has permit for 2-story dwelling 7816 Morningside Drive, N. W.; cost \$12,000.

D. C., Washington — David Brown, 1030 Euclid, N. W., has permit for 2-story, brick dwelling 6030 Sth St., N. W.

D. C., Washington — Joseph M. Stanley, 5512 Broad Br. Rd., N. W., has permit for 2-story, brick, and tile dwelling, 3118 Rittenhouse St., N. W.

Fla., Jacksonville—A. L. Clayton, Blum Bldg., erecting 2-story dwelling, 2010 St. John Ave., for P. C. Howe, Pres., Florida Motor Lines, Inc.; cost \$17,000.

Fla., Miami—Bostwick Construction Co., Leonard Bostwick, 2233 S. W. Ninth St., has plans by C. Leroy Kinports, Kumquat Ave., for dwelling, Kumquat Ave. west of Douglas Rd.; owner builds.

Fla., Miami—A. E. Staley, 1408 Bayshore Drive, Point View, expending \$20,444 in improvements to residence; constructing residence addition; sunken garden; swimming pool and ornamental wall; Arthur Laidler-Jones, Archt., Huntington Bldg.; Rodney Miller, Inc., 2618 Alhambra Circle, Contr., Coral Gables, Miami.

Md., Baltimore—Blenheim Realty Corp., Phillip E. Lamb, erect residence, Pinehurst; stone or brick; Edw. H. Glidden, Jr., Baltimore Life Ins., Bldg., Archt.; C. K. Wells, 3538 Old York Rd., Bldr.

Md., Baltimore—C. Albert Lephardt, 3825 Callaway Ave., has contract for residence, 3813 Harrington Rd., for Isaac Margolis, 3825 Garrison Blvd.; brick, 2½ stories, 26x36 ft.; Fred E. Beall, Archt., 334 St. Paul St. 6-23

Md., Baltimore—C. Albert Lephardt, 3823 Callaway Ave., has contract for residence, Bell and Granada Ave., for Hyman J. Margolis, 3821 Garrison Blvd.; Fred E. Beall, Archt., 334 St. Paul St.; brick, 2½ stories, 26x36 ft. 6-23

Mo., Bolivar—C. A. Bissman, Springfield, has contract for Colonial dwelling for Dr. Ben Hammontree; 1½-stories; sunparlor; exterior walls of frame covered with siding; wood shingle roof; install air conditioning system in basement including oil burner, air washer and filter; garage in rear.

Mo., Springfield—Frank L. Sedgwick, 412 E. Grand St., erect residence, 1200 S. Pickwick Ave., foundation in; 40x52 ft., natural brick, conc. found., shingle roof; cost \$13,000; Heckenlively & Mark, Archts., Landers Bldg.; O. C. Allen, Contr. See Want Section—Building Materials and Supplies. 7-7

Ga., Augusta—C. B. Holly, has contract to erect 2 story, stucco dwelling, 937 Milledge Rd., for Mrs. C. M. Clay; cost \$11,600.

S. C., Columbia—J. C. Heslep Co., Caro. Bank Bldg., has contract for erecting residence for Calder Seibels; 2 stories and basement, conc. found., brick and tile construction, tile roof, hardwood and tile floors, steam heat; Harold Tatum, Archt., Columbia.

## Government and State

D. C., Washington — Treasury Dept. let contract to Peter and A. J. Ellis, Inc., Fourth and Courtland Sts., Philadelphia, Pa., for water supply and discharge system.

D. C., Washington—Haughton Elevator & Machine Co., Vermont Bldg., has contract at \$10,837 for form lifts and signal system for Government Printing Office.

Ga., Augusta — Veterans Administration, Construction Service, Washington, D. C., let contract at \$15,980 to Hillard Heating & Plumbing Co., Forsyth Bldg., Atlanta, for boiler and fueling equipment; Veterans Hospital. 6-16

Ga., Fort Benning—Capt. Carl H. Jablonsky, Constructing Quartermaster, let contract at \$62,589 for non-commissioned officers' quarters and garages to Donald MeYer, 11105 Candler Bldg., Atlanta. 1-14

La., Baton Rouge—Alexander King Stone Co., Birmingham, Ind., has contract for limestone for post office; Common brick, Hammond-Baton Rouge Brick Co., Hattiesburg, Miss.; Sand, Home Realty Investment Co., Baton Rouge; Algernon Blair, First Natl. Bank Bldg., Montgomery, Ala., Gen. Contr.; Moise M. Goldstein, Archt., American Bank Bldg., New Orleans. 7-14

Tenn., Knoxville—Ingalls Iron Works Co., 720 Fourth Ave., S. W., Birmingham, Ala., has 1200-ton contract for struc. steel for \$1,000,000 post office; A. W. Kutsche Co., Gen. Contr., 2111 Woodward St., Detroit, Mich. 6-23

Va., Lynchburg—Following subcontractors on \$338,300 post office, Ralph Sollitt & Sons Construction Co., 518 E. Sample St., South Bend, Ind., Gen. Contrs.; wrecking completed, excavation starting: Excavation, A. N. Campbell & Co., Inc., Lynchburg; 400 tons struc. steel, Virginia Bridge & Iron Co., Roanoke; 175 tons rein. steel, Kalman Steel Co., Chicago, Ill.; granite, Stone Mountain Granite Co., Stone Mountain, Ga.; crushed rock, W. W. Boxley Co., Roanoke; sand, Friend & Co., Petersburg, Va.; 3 stories and basement, 200x100 ft., struc. steel skeleton frame fireproofed, clay tile and conc. joist floor construction, Indiana limestone exterior, Virginia greenstone interior base, border and floors.

## Hospitals, Sanitoriums, Etc.

Ga., Fort McPherson—Constructing Quartermaster let contract at \$11,422 to Aqua Systems, 2 LaFayette St., New York, for gasoline fueling system. 7-7

Tex., San Antonio—State Board of Control, Claude D. Teer, Chmn., Austin, let con-



tract for ward building at San Antonio State Hospital to Edward W. Oeffinger, 710 Ave. A, at \$69,530; plumbing and heating at \$15,744 to Jud & Ormond, 703 N. Flores St.; electrical work at \$2163 to Wright Brothers, Electric Co., 405 Main St.; guard fences at \$1694 to Acme Wire & Iron Works, 343 M. Laurel St. 6-30

Va., Amherst—State Colony for Epileptics and Feeble Minded, J. H. Bell, Supt., let contract to C. L. Lewis, Krise Bldg., Lynchburg, for ward building; Johnson & Brannan, Archts., Allied Arts Bldg., Lynchburg. 6-30

### Hotels and Apartments

D. C., Washington—Schneider-Spliedt Co., 1416 F St., has contract for completion of apartment house for Kennedy Warren Apartments; A. B. Mullet & Co., Archts., Union Trust Bldg.

Fla., Winter Park—F. A. Heigle, Contr., remodeling and repairing Virginia Inn; sprinkler system installed; will install elevator; redecorate interior.

Ga., Atlanta—Morgan T. Wynne, Wynne Realty Co., 642 N. Highland Ave., N. E., erect apartment 1084 North Ave., N. E.; 2-stories; conc. found.; brick and cinder walls; comp. roof; hardwood and tile floors; 6 units; owner builds.

Mo., Columbia—H. P. Niedermeyer & Co., 1101 University Ave., has contract at \$15,000 to remodel building into 14 apartments; 3 floors; metal roof, for James Investment Co., 1101 University Ave.; Robt. Deering, Archt., Flora Bldg. See Want Section—Bids Asked.

### Schools

Ala., Huntsville—Huntsville Board of Education let contract to George A. Rogers for additions to West Huntsville School; 2 stories, conc. foundations, brick veneer, comp. roof, wood floors.

Ga., Atlanta—Board of Education let contract to W. E. Fennell, 232 Ivy St., N. E., for South Atlanta school for colored children; 1 story and basement, 158x56 ft., 8 classrooms, offices and kitchen; conc. foundations, brick veneer walls, comp. roof.

Ga., Atlanta—Kalman Steel Corp., Bethlehem, Pa., reported, has contract for 110 tons rein. steel for North Fulton high school, Southern Ferro Concrete Co., Gen. Contr., 70 Ellis St., N. E., at \$105,580; Ingalls Iron Works, Birmingham, Ala., furnishing 48 tons struc. shapes. 6-9

Ga., Thomasville—Board of Education let contract to J. S. Milligan Co., Thomasville, for two schools; 1 story and basement, 118 x53 ft., 6 rooms.

Md., Arbutus—Baltimore County School Commrs., Towson, let contract to Minter Homes Corp., Dundalk, for grade school addition and alterations; 50x60 ft. and 42x76 ft., 1 story, containing 2 classrooms and assembly hall.

Md., Towson—Towson Normal School let contract to Engineering & Contracting Co., 504½ St. Paul St., for elementary school addition; 3 stories, brick; Smith & May, Archt., Baltimore Tr. Bldg.; Reeder, Elise & Aikes, Mech. Engrs., 916 N. Charles St. 7-14

Miss., Jackson—Board of Trustees, East Pearl Consolidated School Dist., let contract at \$10,995, to J. R. Flint, for rebuilding school, Hwy. 80, east of Jackson; Claude H. Lindsley, Archt. 7-14

Miss., Meridian—Long Creek Consolidated School Dist. let contract at \$6998 to F. W. McDonald, for 54 x 125-ft. brick school; 1 story and basement. 6-30

N. C., Erwin—George W. Kane, Durham, has contract for teacherage; \$17,200; George Watts Carr, Archt.

Tex., College Station—Board of Directors, Texas A. & M. College, S. G. Bailey, Sec., let contracts for following construction:

**Petroleum Engineering, Geology and Texas Engineering Experiment Station Structure**—to Henger & Chambers, Dallas, Natl. Bank Bldg., Dallas.

**Two Units of Veterinary Hospital**—to George E. Welland, San Antonio.

**Water Mains**—to Municipal Engineering Co., Tower Petroleum Bldg., Dallas

**Sewage System**—Kirkwood, Wharton and Lee, 523 N. Flores St., San Antonio;

plans by F. E. Giesecke, College Archt. 6-23

Va., Denbigh—J. W. Davis, General Delivery, Newport News, Contr. for \$28,000 school, let following subcontracts: Electric, Healey Electric Co.; plumbing, W. D. Kitchen, 29 W. Bank St., Petersburg; millwork, Miller Manufacturing Co.; roofing, N. W. Martin and Brother, both Richmond; painting, Nester, Inc., Newport News.

Va., Roanoke—Roanoke County School Board let contract at \$12,975 for Conehurst elementary school to Wood Construction Co., United Cigars Bldg., and at \$5195 for Garden City school addition; heating for Conehurst to J. L. Powell & Co., 106 Second St., S. W.; for Garden City to Ideal Plumbing & Heating Co., 311 Tazewell Ave.

### Stores

D. C., Washington—Brownley Estate has permit for 4-story, brick, stone and conc. and steel store building 1309 F St., N. W.; cost \$60,000.

Ga., Atlanta—Brazell, Miller & Newbanks, Norris Bldg., have contract for store, Cor. North Ave. and Luckie St., N. W., for Mrs. Helen Potts Adams, 819 Juniper St., N. E.; Walter P. Graydon, Archt., 511 Standard Bldg. 7-14

Ga., Cartersville—W. C. Walton, has plans by Daniel & Buntell, Archt., 701 Georgia Savings Bank Bldg., Atlanta, for store; 2-stories and basement, 64x100 ft.; conc. found.; brick walls; tar and gravel roof; plate glass; millwork; owner builds with E. W. Smith, in charge. 6-16

Md., Baltimore—Fred Finke, 6315 Harford Rd. and 204 Hearst Tower Bldg., let contract to Mervis Construction Co., 1650 E. Fayette St., for store 6317 Harford Rd., for American Stores Co., 2120 Lafayette Ave., Lessee; 1 story; brick; 27x77 ft.; Samuel Smullian, Archt., 3721 Belle Ave.

### Warehouses

Ga., Atlanta—A. C. & J. Walters, 587 Virginia Ave., N. E., erect warehouse, same address; conc. frame; owner builds.

## WANT SECTION

### THE CLASSIFICATIONS IN THIS SECTION ARE:

#### Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

#### Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

#### Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

*Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.*

### Machinery and Supplies

**Bulk Cement Plant.**—Skrainka Construction Co., 805 Security Bldg., St. Louis, Mo.—Wants data and prices on complete equipment for bulk cement plant, including stone and sand hopper with weigh batchers.

**Motor.**—Guyan Machine Shops, Inc., (Mech. Dealer), Logan, W. Va.—Wants prices and data on A. C. motor, 5 h. p., 600 r. p. m., 220 volts, 3 phase, 60 cycle.

**Pipe Machines.**—Henry Walke Co. (Mill Supplies), 407 Union St., Norfolk, Va.—Wants prices and data on second hand pipe machines, motor or belt driven; capacity ¼-in. to 12-in.; if motor driven, d. c., 220 volts.

**Potato Chip Making Equipment.**—Mary E. Bryan, 324 E. 10th St., Sarasota, Fla.—Wants prices and data on equipment for making potato chips.

Guyan Machine Shops (Mech. Dealers), Logan, W. Va.—Wants prices and data on following.

**Motors.**—D. C., 500 volts, 25 to 50 h. p., not over 1200 r.p.m., also 5 h. p., not over 1200 r.p.m.; A. C., GE, 7½ h. p., 1200 r.p.m., 220 volts, 3 phase, 60 cycle, without compensators;

**Air Compressor.**—50 cu. ft., belt or motor driven;

**Hoist.**—200 h. p., or larger, for handling 1000 ft. of 1-in. rope at 1000 ft. per minute;

**Riveting Hammer.**—Boyer 50

**Steel Pulley or Steel Casting for Pulley.**—for pulley about 17-in. or 18-in. diameter, about 7-in. face;

**Boiler (Saw Mill) and Engine.**—about 20 h. p.

### Miscellaneous

**Leather.**—Columbia Lumber & Manufacturing Co., Columbia, S. C.—Wants prices and data on small quantity of genuine leather for covering court room doors.

**Paper Bags, Boxes.**—J. P. Long, Lincoln, N. C.—Wants prices and data on paper bags and boxes, suitable for packing candy for retail distribution.

**Soil Binder.**—M. H. Hollingsworth, 1614 Pennsylvania Ave., Miami Beach, Fla.—Wants prices and data on strong non-waterproof binder, or some viscous substance for forming ordinary rich soil into small cubes that will not crumble when handled.

**Staves.**—B. Frank Gudger & Co., c/o 203 Taylor Bldg., Battery Park Ave., Asheville, N. C.—Wants prices and data on staves.

**Swimming Pool.**—Town of Walhalla, S. C., George L. Wilson, Mayor—Data and prices

on swimming pool, 60x120 ft. or larger; brick or cement.

**Vault Door.**—City of Salisbury, N. C., B. V. Hedrick, City Mgr. and Purchasing Agent.—Wants prices and data on 4 by 6-ft. vault door; either new or second hand, in good condition.

### Building Material and Equipment

Love and Barr, 624 Bernhardt Bldg., Monroe, La.—Want prices and data on sub-bids and materials in connection with bid on Monroe post office, due Aug. 10.

Frank L. Sedgwick, 415 E. Grand St., Springfield, Mo.—Wants following for \$13,000 residence:

#### Incinerator

#### Brass and Bronze Work

H. P. Niedermeyer, 1101 University Ave., Columbia, Mo., contractor for remodeling building into 14 apartments for James Investment Co., 1101 University Ave., receives bids July 28 for following:

**Beds.**—folding or roll-away

**Carpet.**—room and stair

**Gas Ranges**

**Lighting Fixtures**

**Plumbing Fixtures**

**Refrigerators**

**Wall Paper**

**Woodwork.**—built in.



Kroger Grocery & Baking Co., Oklahoma City, Okla., wants following for store, cost \$14,000, equipment to cost \$10,000:

**Electric Refrigerators**  
**Floors**—composition  
**Metal Ceilings**  
**Roof**—felt or hip and built-up  
**Steel Sash and Trim**  
**Wire Glass**

**Sub-Bids.**—Sjorstrom & Sons, Inc., 1617 Crosby St., Rockford, Ill., wants sub-bids on all branches of work in connection with Marine Hospital, Memphis, Tenn., including:

**Electric Elevators**  
**Floors**—linoleum, terrazzo, tile  
**Limestone**  
**Marble**  
**Roof**—built-up, slate  
**Interior Tile**

#### Bids Asked

**Automobiles.**—Interior Dept., Purchasing Officer, Washington, D. C.—Bids July 25 for 1/2-ton capacity automobile truck, Reg. 81; July 26 for 4-door sedan type, medium weight automobile.

**Boat Repairs.**—U. S. Engineer Office, Norfolk, Va.—Bids July 28 for overhauling U. S. derick barge No. 803; Cir. 765.

**Bridge.**—State Roads Comsn., L. H. Steuart, Sec., Baltimore, Md.—Bids July 26 for double 133-ft. span, 27-ft. roadway, struct. steel truss superstructure, over Conocheague Creek, on Fairview-Cearfoss Road.

**Brown Print Cloth, and Paper, Steel Bar.**—Navy Dept., Bureau of Supplies and Accounts, Washington, D. C.—Bids July 26 for furnishing brown print cloth and paper, steel bar to Washington Navy Yard.

**Bulkheads.**—New Orleans, La.—See Construction News—Airports, Airplane Plants, etc.

**Cafeteria Equipment.**—District Comms., 320 District Bldg., Washington, D. C.—Bids July 27 for cafeteria equipment for public schools, including bar, meat block, closet, serving counters, cashiers counters, hoods, kettle, dishwashing machine, food cutter, mixing machine, paring machine, slicing machine, gas bake oven, pastry rack, pot and pan rack, traffic rail, 3-section gas range, 2 electric refrigerators, sink, steam, bakers' table, cafe tables, cooks' tables, vegetable tables, work tables and battery of coffee urns.

**Cement Concrete Paving, etc.**—Board of Awards, Baltimore, Md.—Bids July 27 for grading, curbing and paving with cement conc. streets in Contr. 629.

**Clearing Site.**—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids Aug. 4 for clearing site for post office, Malone, N. Y.

**Coal.**—East Baton Rouge Parish School Board, W. S. Hatcher, Supt., Baton Rouge, La.—Bids Aug. 1 for coal for various schools.

**Dikes and Revetment.**—See Construction News—Miscellaneous Construction.

**Dredging.**—U. S. Engineer Office, 30 Whitehall St., New York.—Bids Aug. 9 for 119,000 cu. yd. dredging, South River, New Jersey.

**Dredging.**—U. S. Engineer Office, Wilmington, Del.—Bids Aug. 12 for 75,000 cu. yd. dredging, Christiana River, Del.

**Electric Distribution, Street Lighting System, etc.**—Constructing Quartermaster, Maxwell Field, Montgomery, Ala.—Bids Aug. 2 for construction of electric distribution system, street lighting system, transformer vaults and gate house and switching station.

**Gasoline.**—Panama Canal, General Purchasing Officer, Washington, D. C.—Bids Aug. 3 for 1,000,000 gal. gasoline; Sch. 2775.

**Kitchen Equipment.**—Constructing Quartermaster, 39 Whitehall St., New York.—Bids July 28 for construction and installation of kitchen and special equipment in hospital at Fort Jay; Cir. 1.

**Lighting Standards.**—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids July 29 for furnishing and installing special lighting standards at post office, Fort Worth, Texas.

**Lighting Fixtures (Interior).**—Treasury

Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids Aug. 11 for furnishing and installing interior lighting fixtures, Marine Hospital, Louisville, Ky.

**Lumber.**—Dallas County, J. L. Crosthwait, Auditor, Dallas, Texas—Bids July 28 for one car No. 1 rough fir lumber and one or more cars yellow pine, for use in District No. 1.

**Motor Bus.**—District Comms., 320 District Bldg., Washington, D. C.—Bids July 29 for motor bus.

**PANAMA CANAL.** Office of General Purchasing Office, Washington, D. C.—Bids Aug. 1 for ship saw, band saw, metal-grinding and wood-working machines, saw tables, wire solder, automobile tires and inner tubes and automobile washing outfit.

**Piles.**—U. S. Engineer Office, Kansas City, Mo.—Bids July 26 for 330 round wood piles, Cir. 6.

**Post Office Extension and Remodeling.**—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids Aug. 16 for extension and remodeling, except elevators and lighting fixtures of post office, Jersey City, N. J.

**Post Office.**—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids Aug. 9 for construction of post office, Auburn, Ala.

**Post Office.**—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids Aug. 11 for construction of post office, Jeannette, Pa.

**Post Office.**—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.—Bids Aug. 5 for construction of post office, Athens, Ala.

**Sewer Construction.**—Bd. of Awards, Baltimore, Md., George E. Finck, Sewerage Engr.—Bids July 27 for sanitary sewers and appurtenances, Sanitary Contr. No. 282, comprising inverted siphon of c. i. pipe; work includes: 185 ft. of 42x42 in. rect. rein. conc. sewer; 2730 ft. of 18-in. and 2730 ft. of 24-in. c. i. pipe sewer, together with valves, special c. i. pipe fittings, masonry chambers and manholes.

**Steel Castings, Cast Steel Ball and Socket Joints.**—U. S. Engineer Office, Wilmington, N. C.—Bids July 26 for 4 cast steel hopper doors; for two 15-in. cast steel ball and socket joints.

**Tank and Tower.**—Department of Justice, Bureau of Prisons, Washington, D. C.—Bids July 25 for 200,000-gal. tank and tower for reformatory, El Reno, Okla.; Sch. 729.

**Telephone Parts.**—Signal Corps Procurement Dist., U. S. Army, 1819 W. Pershing Road, Chicago, Ill.—Bids July 26 for 600 transmitter buttons, 600 desk boxes; Cir. 1.

**Tie Bars, Channels and Bolts, Pinions and Rack.**—U. S. Engineer Office, Huntington, W. Va.—Bids July 26 for tie bars, channels and bolts for Lock 2, Big Sandy River, and pinions and rack for Lock No. 3, Big Sandy River.

**Wire Rope Sheaves.**—U. S. Engineer Office, Huntington, W. Va.—Bids July 25 for wire rope sheaves for Maneuverboats No. 4 and 5.

Board of Awards, Baltimore, Md.—Bids July 27 for following for Bureau of Water Supply, Leon Small, Water Engr.:

**Partitions and Storage Bins**—for Mt. Royal Maintenance Headquarters

**Chlorine**—liquid.

Board of Awards, Baltimore, Md.—Bids July 27 for following for Department of Education:

**Gymnasium and Playground and Miscellaneous Supplies**

**Stage Curtains and Equipment.**

**DEPARTMENT OF AGRICULTURE,** Division of Purchase and Sales, Washington, D. C.—Bids on dates indicated for following:

**Bird Bends**—250,000 to 500,000, for Washington, Pro. 3227, July 26

**NAVY DEPARTMENT,** Bureau of Supplies and Accounts, Washington, D. C.—Bids on dates indicated for following, delivery as shown:

**Lamp Sockets and Moulds**—Aug. 2, Portsmouth, N. H., Sch. 8382;

**Mechanical Indicators and Recorders (CO.)**

**and Spare Parts**—Aug. 9, various east and west coast points, Sch. 8384;

**Oxygen Valves**—500, Aug. 2, Mare Island, Sch. 8391;

**Steel Boiler Tubes**—1,300, Aug. 2, Mare Island, Sch. 8392;

**Valve-Reseating Outfits**—13, Aug. 2, Mare Island, Sch. 8393;

**Black Cannon Powder**—Aug. 2, various east and west coast points, Sch. 8394;

**Switching Locomotive**—Aug. 9, Mountain View, Calif., Sch. 8400;

**Glass Edger Machine**—motor driven, for non-shatterable glass cutting, Aug. 2, New York or San Francisco, Sch. 8402;

**Deck Winches**—2, double drum, steam driven, Aug. 2, New York or San Francisco, Sch. 8404;

**Bunker Fuel Oil**—A and C grades, Aug. 5, various gulf ports, Sch. 8405.

**SIGNAL CORPS,** Supply Officer, Army Base, Brooklyn, N. Y.—Bids on dates indicated for following:

**Balloons**—14,400 S. C. type, ML-50, 12,000 S. C. ML-51, 12,000 S. C. ML-64, Cir. 2, Aug. 2.

**TREASURY DEPARTMENT,** Office of Supervising Archt., Washington, D. C.—Bids on dates indicated for work at following points:

**Shelby, Ohio**—construction of \$105,000 post office, Aug. 5

**Tooele, Utah**—construction of \$75,000 post office, Aug. 23

**Hartford, Conn.**—exterior and interior lighting fixtures for post office and court house, Aug. 10

**Denison, Texas**—heating boiler for post office, Aug. 2

**Seranton, Pa.**—wire mesh partition for post office, July 27

**Durham, N. C.**—elevator and dumbwaiter for post office, Aug. 9.

**TREASURY DEPT.,** Division of Supply, Washington, D. C.—Bids on dates indicated for following:

July 25 for 70 lamp shades, 16 lighting fixtures, 4 globes, Pro. 25;

July 26, for 5 fire hose racks, 5 pipe flanges, 5 nipples, 5 malleable iron elbows, 5 nipples, 5 pipe caps, 5 brass nozzles and 24 washers, Pro. 183.

**VETERANS' ADMINISTRATION,** Procurement Division, Washington, D. C.—Bids on dates indicated for following:

9000 wooden shoes, July 29, Cir. G-10

3000 paring knives, 244 spatula knives, 394 frying pans, 4800 lb. steel wool, 500 rat traps, 1800 mouse traps, 300 cake turners, 200 canisters, 100 cleavers, 100 meat-block brushes, 72 pot cleaner chains, 1200 vinegar bottles, 144 boning knives, July 29, Cir. G-7

850 qt. shellac varnish, 225 gal. turpentine, 50 1/2-gal. containers spar varnish, July 26, Cir. 2-M

500 sets chair casters, July 27, Cir. 11-M

5 supply cabinets, July 25, Cir. 16

1 ether vapor and suction apparatus, July 25, Cir. 25

Kitchen equipment, including 4800 pepper shakers, 7200 salt shakers, 3000 sugar dispensers, 48 potato ricers, 75 bakers' sieves, 294 skimmers, 224 mixing spoons, 3000 custard cups, 200 doughnut cutters, 200 lemon extractors, 200 cooks' forks, 444 butcher knives, 300 cooks' knives, 200 biscuit cutters and 200 can openers, bids July 26, Cir. G-6.

**Vicksburg, Miss.**—Bids will be opened August 4 in the United States Engineer Office here, Major T. B. Larkin, District Engineer, for the construction of approximately 9,731,900 cubic yards of earthwork on the east and west banks of the Mississippi River in Mississippi and Louisiana, about three miles south of Longwood, Miss.

**Rockingham, N. C.**—An improved lining for peach, apple and orange baskets has been developed by Robert L. Steele, 3rd, proprietor of the Martha Orchards.

## INDUSTRIAL NEWS

### Building Laboratory and School

International Business Machines Corporation has begun construction of a new laboratory and school building at its plant at Endicott, N. Y. The cost will be approximately \$400,000.

### Dry Battery Factory Offered

Assets of the Southern Battery & Electric Corporation, Appomattox, Va., will be offered at public auction on the premises August 6 by F. C. Dresser, receiver, Appomattox. The sale will cover a fully equipped factory for the manufacture of dry batteries, stock of raw material, delivery equipment, laboratory equipment, office furniture and fixtures, etc.

### Vice President in Charge of Agencies

The Provident Life and Accident Insurance Company of Chattanooga, Tenn., Robert J. Maclellan, president, recently announced the appointment of John H. Leaver, of Des Moines, Iowa, as vice president in charge of agencies, Life Department. Mr. Leaver comes to the Provident from the Missouri State Life Insurance Company, with which he has been connected since 1926.

### General Electric Transfers Department

Vice-President J. G. Barry of the General Electric Company, Schenectady, N. Y., announces the transfer of the conventions and exhibits division, under the management of F. H. Gale, from the commercial general department to the publicity department. This consolidation was effected, it is explained by C. H. Lang, manager of the publicity department, to co-ordinate more effectively the general publicity program.

### Loadmaster Equipped With Magnet

The Loadmaster, a compact material handling machine manufactured by the Bucyrus-Erie Company, South Milwaukee, Wis., and mounted on wheels or crawlers, may now be obtained equipped with a 20-inch Ohio magnet for handling scrap iron and small castings which ordinarily require considerable time for hooking. Power is supplied to the magnet by a 2 K.W. electric plant mounted on the truck frame of the crane.

### Tubize Chatillon Promotions

Directors of the Tubize Chatillon Corporation, New York City, with plants at Rome, Ga., and Hopewell, Va., have elected F. C. Niederhauser vice-president in charge of operations and H. N. Cappel vice-president in charge of sales. Mr. Cappel, in charge of the advertising and sales service departments, was appointed sales manager in 1930. E. R. Van Vliet, vice-president and treasurer, was elected a director and member of the executive committee to fill vacancies created by the resignation of Col. W. P. Barba.

### Six-Wheel Drive FWD Truck on Big Project

A 15-ton six-wheel-drive FWD truck was recently put in service at Haifa, Palestine, on a \$45,000,000 pipe line development of the Iraq Petroleum Company. This truck, made by the Four Wheel Drive Auto Company, Clintonville, Wis., is Model MX, especially designed for transporting heavy loads over poor roads and for cross-country travel.

### Westinghouse Activities

Electric motors for operating University Park water pumping station at Denver will be furnished by Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., where six synchronous motors totaling 3000 horsepower are now being built. Westinghouse will also furnish equipment to illuminate Wright Memorial at Kitty Hawk, N. C.; 250—24-inch airway beacons, 150 of which will light the route between New York and New Orleans, 45 to Alaska, and the remainder to be held for replacement use; 1000 street lighting equipments for Washington, D. C.; 9 miles of cable for airways division of the Department of Commerce, Fort Worth, Tex., and hollowspun piles to St. Louis.

### Develops Alcohol Denaturant

Treasury order No. 10, issued July 1, covering revisions in completely denatured alcohol formulae, provides for the use of TECSOL in C. D. A. No. 10 formula. TECSOL was developed in the laboratories and plant of the Tennessee Eastman Corporation, Kingsport, Tenn., and is manufactured by that company, a subsidiary of the Eastman Kodak Company, Rochester, N. Y. The new C. D. A. No. 10 formula embodying TECSOL, while primarily compounded as a solvent for varnish, paint and lacquer, is available for all other completely denatured alcohol uses, including anti-freeze.

## Trade Literature

**Whiting Cranes.**—The Whiting Corporation, Harvey, Ill., has issued an illustrated booklet No. 214 on Whiting cranes for overhead handling at low cost. The publication of 68 pages features the corporation's complete line of electric and handpower traveling cranes.

**"Caterpillar" Sixty Grader.**—The Caterpillar Tractor Co., Peoria, Ill., has issued a folder on the new power-controlled "Caterpillar" Sixty Grader, powered by a "Caterpillar" engine, instantly directed at the touch of a lever to various grader adjustments.

**Cameron Motorpump.**—The Ingersoll-Rand Company, Phillipsburg, N. J., and New York City, has issued a folder devoted to the Cameron Motorpump, an Ingersoll-Rand product, made in sizes from ¼ to 25 horsepower, with capacities from 5 to 800 gallons per minute.

**Squirrel-Cage Motors.**—Multi-Speed Squirrel-Cage Motors is the subject of a bulletin released by the Wagner Electric Corporation, St. Louis, Mo., in which a number of installation illustrations appear, with a detailed discussion of problems involved in each.

**Protecting Rubber Belts.**—The B. F. Goodrich Company, Akron, Ohio, has issued a bulletin covering the storage of rubber products, in which it is said rubber belts should be stored in a dark, cool place (not over 70 degrees Fahrenheit) and maintained under humidity conditions which are not too dry. The bulletin also describes additional measures for belt protection.

**Uses of Plate Metal.**—The American Rolling Mill Company, Middletown, Ohio, recently published Armeo Architectural Bulletin No. 9 on the "Uses of Plate Metal in Mechanical Equipment." The publication was compiled by Armeo Sheet Metal Consulting Service in collaboration with W. H. Junker, mechanical engineer for Harry Hake, architect, Cincinnati.

**Gunite Coated Pipe.**—The Naylor Pipe Company, Chicago, has issued Technical Data Bulletin No. 32-3 on Naylor Spiralweh Cement-Lined Gunite Coated Pipe for the purpose of describing the application of a cement mortar lining and reinforced gunite coating to the Naylor Spiral Truss structure. Naylor cement-lined pipe is intended for transmission purposes, as well as for municipal water and sewer systems.

**House Design, etc.**—Under the caption of "House Design, Construction and Equipment." The President's Conference on Home Building and Home Ownership, Washington, D. C., has issued volume V, the fifth in a series of eleven volumes to be released, containing final reports of the Conference. It is priced at \$1.15 post paid.

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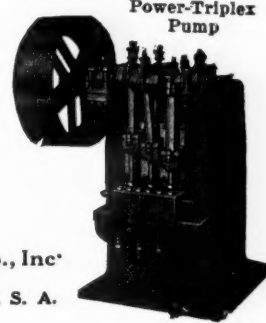
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## FINANCIAL NEWS

### Bond Issues Proposed

Miss., Jackson—State of Mississippi, Sen. Connor, Gov., plans selling \$12,500,000 bonds; \$8,000,000 to absorb outstanding state warrants and other indebtedness and \$4,500,000 refunding bonds.

Mo., St. Joseph—City defeated \$160,000 school bonds. 6-30

Okla., Hollis—Harmon County votes July 26 to cancel \$175,000 bonds, the unsold portion of an authorized \$325,000 issue.

Tenn., Chattanooga—Hamilton County, Will Cummings, County Judge, reported, completed arrangements with Hamilton National Bank to handle \$500,000 loan in anticipation of taxes.

Tenn., Nashville—City, S. H. McKay, City Clerk, opens bids July 26 for \$100,000 bonds: \$65,000, street improvement; \$35,000, general improvement.

Tex., Edcouch—Edcouch-Elsa Independent School Dist., J. D. Campbell, Pres. School Board, sell \$15,000 bonds July 25; 5%. 7-14

Tex., University Park, Dallas—City, H. J. Curtis, Mayor, plans election on \$21,000 bonds for purchase of additional acreage for Curtis Park.

Va., Alexandria—City, Wallace Lawrence, Mgr., opens bids July 28 for \$150,000 public improvement and funding bonds.

### Bond Issues Sold

Miss., Vicksburg—City sold 5½%, \$90,000 street improvement refunding bonds at par and accrued interest to Municipal Water Works.

S. C., Charleston — William J. Leonard, Charleston County Treasurer, purchased \$9000

bonds of St. Paul's District Centralized High School.

S. C., Columbia—State, J. H. Scarborough, Treas., sold \$5,000,000 6% state highway notes maturing Feb. 15; \$2,874,000 at par to New York Life Insurance Co., New York; \$2,126,000 to South Carolina National Bank; arranged to buy \$5,000,000 highway notes maturing July 15.

Tenn., Bristol—City, W. K. Carron, Recorder, sold \$75,000, 6% \$1000 denom. bonds to Minich, Wright & Co., Bristol, at par; purchasers to pay attorney's fee and printing cost.

### New Financial Corporations

Ga., Atlanta—Southern Insurance Securities Corp., 1203 Atlanta Nat. Bk. Bldg., chartered with capital of \$1,000,000; George W. Powell, Pres.

La., Marksville—Avoyelles Trust and Savings Bank opening with offices in Marksville and Bunkie to resume business of closed Citizens Bank and Trust Co.; W. L. Caldwell, Pres., Bunkie

Mo., Clayton—United Investment Corp. chartered; A. H. Kerth; Ohnus F. Meyers, University City; A. H. Keith, Atty., County Bank Bldg., Clayton.

Mo., Kansas City—Bell Reno Investment Co. chartered; John B. Gage, Dierks Bldg.; Oscar S. Hill; Gage, Hill and Leshner, Attys., 1020 Bryant Bldg.

Mo., Springfield—Citizens Bank formed by consolidation of Citizens and Peoples banks; Ed V. Williams, Pres.

N. C., Wilson—Bank headed by Graham Woodward, temporary president, to open.

S. C., Timmonsville—Pee Dee State Bank,

capital \$10,000, chartered; J. M. Shuford, Pres.

Va., Saltville—First National Bank of Saltville formed by consolidation of Saltville Savings Bank and First National Bank of Saltville.

W. Va., Huntington—Tri-State Brokerage Co., capital \$5000, incorporated; A. C. Rubin, H. C. Rubin, Mildred Chapman.

W. Va., New Martinsville—Bank of New Martinsville reopened.

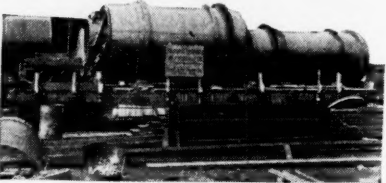
### Atlantic National Bank of Jacksonville

Showing total resources of \$31,452,071, a statement of condition, as of June 30, 1932, of the Atlantic National Bank of Jacksonville, Fla., reveals loans and discounts of \$2,142,608, demand loans of \$1,857,415, U. S. bonds to secure circulation, \$1,000,000; U. S. bonds and certificates of indebtedness, \$14,032,115; cash and due from banks \$5,155,537, etc. The bank is capitalized at \$3,000,000 and has surplus and undivided profits of \$504,667. Deposits amount to \$26,894,064. Affiliates of the Atlantic National Bank of Jacksonville include: The Atlantic National Bank of Daytona Beach; the First National Bank, Gainesville; the Palatka Atlantic National Bank, Palatka; the Sanford Atlantic National Bank, Sanford; West Palm Beach Atlantic National Bank, West Palm Beach; Fairfield Atlantic Bank, Riverside Atlantic Bank, Springfield Atlantic Bank, American Trust Company and the Atlantic National Company, all of Jacksonville.

Bids will be opened August 10 in the office of John M. Denis, State Treasurer, Annapolis, Md., for the purchase of \$3,076,000 certificates of indebtedness.

# SOUTHLAND

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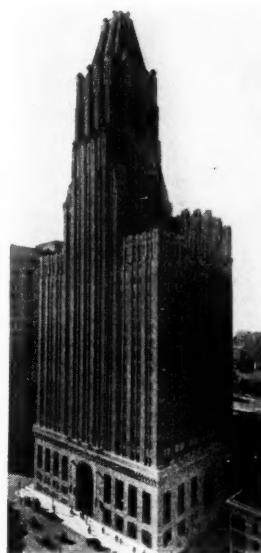
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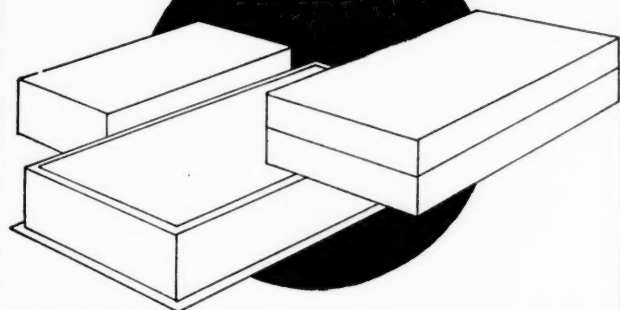
**B**ALTIMORE has been materially helped in its bid for recognition as an important shipping and distributing point by its easy accessibility to inland industrial centers with correspondingly advantageous rail rates.

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## BALTIMORE TRUST COMPANY

MEMBER FEDERAL RESERVE SYSTEM

## Better Packing FOR TEXTILES



Pack your textile product in paper boxes with personality . . . styled to fit today's markets . . . printed to give your trade mark added effectiveness—in any desired combination of colors. Five strategically located Southern plants to give you quick service and low freight rates. Write today to our nearest plant for samples and prices.

**OLD DOMINION BOX COMPANY, INC.**  
Lynchburg, Va.

Winston-Salem, N. C. Burlington, N. C. Ashboro, N. C. Charlotte, N. C.

*quality* **OLD DOMINION  
Paper Boxes**

## STALE GAS IS FEEBLE!

### Fresh Gas Packs Power

As gasoline grows older, gasoline grows weaker. As staleness increases—power decreases. Stale gas becomes stickier, too—has a greater tendency to foul valves and carbureter. And is more apt to knock.

During the past several years, Gulf has developed a refining and distributing system that assures the motorists of getting FRESH gasoline.

*Get all the power you pay for.*

GET FRESH  
GASOLINE

GET



**GULF REFINING COMPANY**





# PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



Bids close August 3, 1932.

U. S. Engineer Office, Rock Island, Illinois. Sealed proposals, in duplicate, will be received until 2:30 P. M., August 3, 1932, and then publicly opened, for furnishing all plant, labor and material for, and supplying, assembling and installing the following complete and ready for operation, and the necessary concrete foundations:—lock operating machinery for two parallel locks, power house equipment, and electric power and control system for Lock & Dam No. 15, Mississippi River. Further information on application.

Bids close August 9, 1932.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C., July 12, 1932.—SEALED BIDS, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., August 9, 1932, for furnishing all labor and materials and performing all work for the construction of the U. S. post office, etc., at Auburn, Ala. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. One set will be furnished builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any subcontractor or material firm interested and to quantify surveyors, provided a deposit of \$15.00 is made to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close July 26, 1932.

## Bridge

DEPARTMENT OF PUBLIC WORKS  
STATE OF MARYLAND  
STATE ROADS COMMISSION

### NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for construction of bridge as follows:  
Washington County, Contract No. W-112-1-62—Structural steel truss superstructure (double 133 ft. 0 in. span, 27 ft. 0 in. roadway) for bridge over Conococheague Creek on the road from Fairview to Cearfoss  
will be received by the State Roads Commission at its offices, Federal Reserve Bank Building, Calvert and Lexington Streets, Baltimore, Maryland, until 12 M. on the 26th day of July, 1932, at which time and place they will be publicly opened and read. PREQUALIFICATION OF BIDDERS REQUIRED.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1.00 for each separate project, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check, payable to the State Roads Commission of Maryland, as required by Sec. 6, Chapter 539, Acts of 1931, of the amount as set forth in the proposal form.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 12th day of July, 1932.

G. CLINTON UHL, Chairman.

L. H. STEUART, Secretary.

Bids close July 29, 1932.

## \$62,500 Water System Bonds

MADISON HEIGHTS SANITARY DISTRICT OF AMHERST COUNTY, VIRGINIA

Amherst, Va., July 6, 1932.

Sealed bids will be received by the Board of Supervisors of Amherst County, Virginia, at Amherst, Virginia, until twelve o'clock, noon, July 29, 1932, for \$62,500.00 Madison Heights Sanitary District Water System Serial Coupon Bonds, bearing five per cent interest, in denominations of \$500.00 and \$1000.00 and payable \$2,000.00 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 years after date respectively, \$2500.00, 17, 18, 19, 20, 21, 22 and 23 years after date respectively, \$3000.00, 24, 25, 26, 27, 28, 29 and 30 years after date respectively.

Certified check for one per cent of bid required.

The right is reserved to reject any and all bids.

W. H. CARTER, Secretary.

Bids close July 26, 1932.

## Maryland Highway Work

DEPARTMENT OF PUBLIC WORKS  
STATE OF MARYLAND  
STATE ROADS COMMISSION

### NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for the building of five sections of State Highway as follows:

Anne Arundel County, Contract No. AA-143-711—One section of State Highway along the Annapolis Blvd. and the Generals Highway through Glen Burnie from Fourth Avenue north to Fifth Avenue south, for a distance of 0.77 mile (Macadam Widening and Conc. Curb)

Carroll County, Contract No. CI-117-52—One section of State Highway along the Mexico-Hampstead Road from a point 0.4 mile east of Mexico toward Hampstead for a distance of 1.28 miles (Concrete)

Charles County, Contract No. Ch-47-82—One section of State Highway from Waldorf toward Berry for a distance of 1.36 miles (Gravel)

Charles County, Contract No. Ch-120-82—One section of State Highway along the LaPlata-Bryantown Road from the end of Contract Ch-103 toward Brice for a distance of 1.08 miles (Gravel)

Charles County, Contract No. Ch-121-82—One section of State Highway along the Horsehead-Patuxent Road from the Prince George's County Line to Patuxent for a distance of 1.42 miles (Gravel)

will be received by the State Roads Commission at its offices, Federal Reserve Bank Building, Calvert and Lexington Streets, Baltimore, Maryland, until 12 M. on the 26th day of July, 1932, at which time and place they will be publicly opened and read. PREQUALIFICATION OF BIDDERS REQUIRED.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1.00 for each separate project, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check, payable to the State Roads Commission of Maryland, as required by Sec. 6, Chapter 539, Acts of 1931, of the amount as set forth in the proposal form.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 12th day of July, 1932.

G. CLINTON UHL, Chairman.

L. H. STEUART, Secretary.

Bids close August 2, 1932.

## Delaware Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department at its office, Dover, Del., until 2:00 o'clock P. M., Eastern Standard Time, August 2, 1932, and at that place and time publicly opened, for contracts involving the following approximate quantities:

### CONTRACT 255

TULLS SCHOOL-WOODLAND—2 MI.  
1-3 Acres Clearing.  
1-3 Acres Grubbing.  
2 Miles Grading (Lump Sum).  
500 Cu. Yds. Borrow.  
1100 Tons Traffic Bound Slag.  
100 Lin. Ft. 15 in. C. M. Pipe.  
60 Lin. Ft. 15 in. R. C. Pipe.  
120 Lin. Ft. 18 in. R. C. Pipe.  
30 Lin. Ft. 24 in. R. C. Pipe.

### CONTRACT 256

SLAG SURFACING  
COWGILLS CORNER-LEIPSI—4 MI.  
4 Miles Grading (Lump Sum).  
1 1/2 Acres Clearing.  
1 1/2 Acres Grubbing.  
3000 Cu. Yds. Borrow.  
2200 Tons Traffic Bound Slag.  
300 Lin. Ft. 15 in. C. M. Pipe.  
150 Lin. Ft. 15 in. R. C. Pipe.  
60 Lin. Ft. 18 in. R. C. Pipe.  
60 Lin. Ft. 24 in. R. C. Pipe.  
30 Lin. Ft. 30 in. R. C. Pipe.

### CONTRACT 257

SLAG SURFACING  
SMITH'S SCHOOL-STAYTONVILLE  
6 1/4 MI.  
6 1/4 Miles Grading (Lump Sum).  
4 Acres Clearing.  
4 Acres Grubbing.  
3000 Cu. Yds. Borrow.  
3500 Tons Traffic Bound Slag.  
400 Lin. Ft. 15 in. C. M. Pipe.  
220 Lin. Ft. 15 in. R. C. Pipe.  
150 Lin. Ft. 18 in. R. C. Pipe.  
60 Lin. Ft. 24 in. R. C. Pipe.  
60 Lin. Ft. 30 in. R. C. Pipe.  
60 Lin. Ft. 36 in. R. C. Pipe.

### CONTRACT "Z"

SEED AND FERTILIZER  
45 Tons Fertilizer.  
2484 Lbs. Perennial Rye.  
1012 Lbs. Timothy.  
704 Lbs. Reclaimed Red Top.  
484 Lbs. Kentucky Blue Grass.  
352 Lbs. Red Fescue.

Above and subsequent contracts will be governed by the 1932 Specifications.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed as specified.

All labor employed on these contracts shall be legal residents of the State of Delaware, and special provisions for use of machinery is provided in each proposal.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the construction of State Highway Contract No. ...."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Complete sets of plans and specifications may be obtained after July 25, 1932, upon receipt of two dollars (\$2.00) for each contract, which amount will not be refunded.

STATE HIGHWAY DEPARTMENT.



Bids close August 16, 1932.

DEPARTMENT OF THE INTERIOR, Washington. Sealed proposals in duplicate will be received at the Department of the Interior until 2 o'clock p. m., Tuesday, August 16, 1932, for furnishing all labor and materials for constructing at Saint Elizabeth's Hospital, Washington, D. C., one male receiving building, and the moving, relocating and remodeling of shops building and T. B. buildings Nos. 1, 2 and 3, including roads, retaining walls, walks, grading and drainage. This work will include excavating, reinforced concrete construction, hollow tile, brick work, cut stone work, granite, architectural terra cotta, marble work, floor and wall tile, terrazzo floors, linoleum floors, miscellaneous structural and ornamental metal work, steel sash, steel stairs, tile, metal and built-up roofing, metal lathing, plastering, carpentry, laundry chutes, metal weather strips, insect screens, window shades, painting, glazing, hardware, plumbing, heating and ventilating, electrical work and outside service connections. Bids will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion

of the contract, and in making awards the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. Drawings and specifications may be obtained upon application to the Construction Service, Veterans' Administration, Room 764 Arlington Building, Washington, D. C. While no deposit will be necessary, the return of the drawings within ten days after opening of bids will be required. Special attention is invited to requirements of the act of March 3, 1931, regarding rate of wages, set forth in the specifications. The entire work must be completed within 300 calendar days. The right is reserved to reject any or all bids, waive technical defects, accept one part and reject the other as the interests of the Government may require. Proposals must be securely enveloped, marked "Proposal for construction of male receiving building, Saint Elizabeth's Hospital," and be addressed to the Secretary of the Interior, Washington, D. C. JOS. M. DIXON, Acting Secretary.

Bids close August 11, 1932.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C.,

July 12, 1932.—SEALED BIDS, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., August 11, 1932, for furnishing all labor and materials and performing all work for the construction complete of the U. S. post office, etc., at Jeannette, Pa. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three (3) sets, may be obtained at this office, in the discretion of the supervising architect, by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. One set will be furnished builders' exchanges, chambers of commerce or other organizations who will guarantee to make them available for any sub-contractor or material firm interested and to quantify surveys, provided a deposit of \$15.00 is made to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

## CLASSIFIED OPPORTUNITIES

### MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

75 CENTS PER ACRE. 31,000 acres. Best cattle land, near railroad. Water. Timber. Clear title. Half cash, or trade clear for clear. Box 2707, Mexico, D. F.

### FARM, FRUIT AND TRUCK LANDS

#### DELAWARE FOR SALE

Estate in Delaware of six hundred acres. Four hundred acres tillable, one hundred acres woodland, one hundred acres game preserve, large mansion house, old shade trees, farm house, two complete sets of buildings.

GEORGE L. TOWNSEND,  
401 Equitable Building,  
Wilmington, Delaware.

### BUSINESS OPPORTUNITIES

HAIR PIN—Wanted manufacturer to make and market newly patented invisible type wire hair pin. Holds hair secure, easy to insert. Particulars, write No. 9197, care of Manufacturers Record, Baltimore, Md.

WE WILL SAVE YOU 40% on construction of your ice and cold storage plant. Many plants designed by us are producing ice under \$2.00 per ton and our cold storage plants eliminate Sunday and night running of compressors. Inquiries solicited. Mayer Construction Co., 3850 Lansdowne Ave., Cincinnati, Ohio.

#### PUBLIC AUCTION

Fully equipped factory for the manufacture of Dry Batteries, machinery and equipment in first class condition, stock of raw material used in such manufacture, batteries in process, delivery equipment, laboratory equipment, office furniture and fixtures. Good-will, trade marks, formulas, accounts receivable, etc.; in fact, all of the assets of the Southern Battery & Electric Corporation of Appomattox, Virginia, will be sold at Public Auction on the premises of the above company at 10:00 A. M. August 6, 1932. Terms 1/3 cash, balance on notes of six and eight months, bearing approved endorsement, with interest from date of sale. F. C. DRESSER, Receiver, Appomattox, Virginia.

### INDUSTRIAL PLANTS

FOR SALE—Canning Plant. Price and list of equipment upon inquiry.

MAURICE METZGER,  
P. O. Box 44, Vicksburg, Miss.

### Rates, Terms and Conditions

RATES: 30 cents a line each insertion. Minimum space accepted, four lines. In estimating the cost allow six or seven words of ordinary length to line. When the advertisement contains a number of long words proper allowance should be made.

#### Rates for Special Contract:

100 lines 28c a line  
300 lines 26c a line  
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TERMS: For transient advertising cash with order; check, post office or express money order or stamps accepted.

On special contract advertising bills are rendered monthly, covering space used each month, payable within ten days.

CONDITIONS: No patent medicine, oil or mining stock advertisements or questionable or undesirable advertisements will be accepted. The assistance of our readers in excluding undesirable advertisements is requested. No display type used.

### INDUSTRIAL PLANTS

#### COTTON MILL For Sale

8500 Spindles  
260 Looms  
360 H.P. New Diesel Engine  
Brick Buildings  
Good Tenant Houses  
Good Labor Conditions  
Exceedingly cheap—Good terms  
Low Taxes

For further information write No. 9188 care Manufacturers Record, Baltimore, Md

### WAREHOUSE

FOR RENT OR LEASE—We have at Norfolk, located on a broad street, with alley on two sides, five-story reinforced concrete warehouse, approximately 88 ft. wide by 184 ft. deep. This building is well located near team track of Norfolk & Western Railroad; has two large freight elevators; each floor cut off by fire doors. Please address P. O. Box 476, Norfolk, Va.

### PATENT ATTORNEYS

PAUL B. EATON, Patent Attorney  
1408-R Johnston Bldg., Charlotte, N. C.  
434 Munsey Building, Washington, D. C.  
417 Wachovia Bldg., Winston-Salem, N. C.

FREE "PATENT PARTICULARS"  
Sterling Buck, over 25 years Registered Patent Attorney. Prompt and thorough services. Suite M 629 F, Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

SEYMOUR & BRIGHT, Registered Patent Attorneys. Established 1876. PATENTS, TRADEMARKS, COPYRIGHTS. Prompt and thorough service. Suite 892, National Press Building, Washington, D. C.

### REPRESENTATIVES WANTED

SALESMAN with ability, satisfactory credentials and references, can secure exclusive sales rights for product needed by every industry—one that has stood the test 25 years. This connection offers immediate good earnings, with continued increase and opportunity to become Field Manager. Give qualifications and experience in application.

ENSIGN PRODUCTS COMPANY,  
10703 Quebec Ave., Cleveland, Ohio.

### SITUATIONS WANTED

AN EXECUTIVE, age 47, skilled mechanic and machine designer, with many years sales experience, wants connection with live mfg. concern, in shop or office. F. H. Goosmann, 730 Froome Ave., Cincinnati, O.

### MEN WANTED

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements, your identity covered and present position protected. Established twenty-two years. Send only name and address for details.

R. W. BIXBY, INC.,  
103 Downtown Bldg. Buffalo, New York



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EQUIPMENT

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NEW AND USED  
**PIPE**  
NEW THREADS AND COUPLINGS  
**GREENPOINT IRON & PIPE CO. Inc.**  
187-207 Maspeth Ave., Brooklyn, N. Y.

RECONDITIONED PIPE  
Large stock of RECONDITIONED pipe, new threads and couplings, from 3/4" to 24" guaranteed suitable for all practical purposes.  
**Marine Metal & Supply Co.**  
167 South Street New York City

**NEW-USED RECLAIMED FROM 1876-77**  
Cut to Sketch and Stocked  
**ALBERT PIPE SUPPLY CO. Inc.**  
Berry and North 15th St. Brooklyn, New York

**IRON AND STEEL PIPE**  
Large quantity new and used Government material in excellent condition, ready for immediate shipment. Low prices.  
**CENTRAL PIPE & SUPPLY CO.**  
Box 1099 Charleston, W. Va.

NEW-USED-UNTESTED  
**PIPE**  
ESTABLISHED 1902  
**ALBERT & DAVIDSON PIPE CORP.**  
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**BOILERS**  
12-150 H.P. HRT. 125 lbs. insured steam pressure. \$2 per H.P. (Casey-Hedges, Erie City and other std. makes).  
4-600 H.P. Edgemore water tube boilers; 200 lbs. steam pressure; \$3 per H.P.  
1-425 Erie City water tube boiler; 160 lbs. steam pressure; \$3 per H.P.  
All set with steel casings; equipped with stacks, fronts, steam fittings, etc.  
We have a large number of other boilers throughout the southeastern states, also generators, motors, pumps and other machinery at unprecedented low prices. What do you need?  
**W. M. SMITH & COMPANY**  
Birmingham, Ala.

**DIESEL ENGINE UNITS**  
FOR SALE-2 FAIRBANKS MORSE 200 HP DIESEL OIL ENGINES connected to 170 KVA A.C. GENERATORS with switchboards and all equipment. Released by change in plans City of Bowling Green, Ky. Will sell cheap, cash or terms; consider trade in. Full particulars from  
**O. C. EVANS, MT. STERLING, KY.**

**PIPE**  
New and second-hand for all purposes  
**THE TRI-STATE PIPE CO.**  
BELLAIRES, OHIO  
BELL PHONE-BELLAIRES 42

**36" PORTABLE TRACK**  
25 lb. rails-7 steel ties per 15 ft. sections. Over ten miles, located Ocala, Fla. Also locomotives, cars, cranes and shovels.  
Write us or have your local dealer do so.  
**EQUIPMENT CORPORATION OF AMERICA**  
1166 So. Wabash Ave., Chicago

FOR SALE-REBUILT EQUIPMENT  
10-Western 12 yd. Std. Ga. Dump cars, steel beams.  
1-Model No. 10 Byers Steam Caterpillar Crane.  
1-P. & H. Model No. 206 Gasoline crawler crane.  
1-3/4 Yd. Shovel front for P. & H. No. 206 machine.  
1-35 Ton Amer. saddle tank loco. ASME & Ohio boiler.  
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Many other locomotives in stock, any type or gauge, also locomotive cranes, draglines, shovels, rails, etc.  
All prices low-Immediate deliveries-Terms to suit.  
**SOUTHERN IRON & EQUIPMENT CO., Atlanta, Ga.**

**RAILS NEW & RELAYING ALL WEIGHTS**  
Let us know your needs. We may have material in stock near you.  
**WE BUY RAILS FIT TO RE-LAY**  
**ROBINSON & ORR**  
Columbia Bldg., 248 Fourth Ave., Pittsburgh, Pa.  
New Frogs and Switches at low prices.

## 10th SOUTHERN TEXTILE EXPOSITION

### Textile Hall Greenville, South Carolina October 17 to 22 inclusive

Modern competition in textile manufacturing demands the most improved machinery and accessories, and the best grades of supplies. Through their use production costs are lowered and profits increased.

In Textile Hall, October 17 to 22, there will be in operation latest types of machinery used in cotton, silk, rayon, and wool mills, and in dyeing, bleaching and finishing plants.

Visitors to the Southern Textile Exposition will come from every southern state.

Complimentary passes will be sent by us to presidents, treasurers, superintendents, and department heads. Exhibitors will distribute thousands of complimentary tickets to operatives. Special railroad rates and Pullman car service have been granted by the railroads. All textile executives and operatives are cordially invited to attend.

**Textile Hall Corporation, Greenville, S. C.**



**Crushed Stone  
Mascot Chatts Roofing Gravel  
Asphaltic Roadway Gravel  
Asphalt Filler Dust**



**AMERICAN LIMESTONE COMPANY**  
KNOXVILLE TENNESSEE

## Asphaltic Concrete

Pre-Mix—Cold Lay

An ideal paving and patching material.  
Not expensive. Of long proven quality.

Handled without heating with ease and dispatch

**W. F. CULBERT & SONS**

*Producers of crushed stone, ballast and  
chemical stone.*

Marion Virginia

## SAND—GRAVEL—BRICK FILTER GRAVEL

Washed Sand and Gravel for Concrete  
Roads and Buildings

Filter Gravel, all sizes—Building Bricks

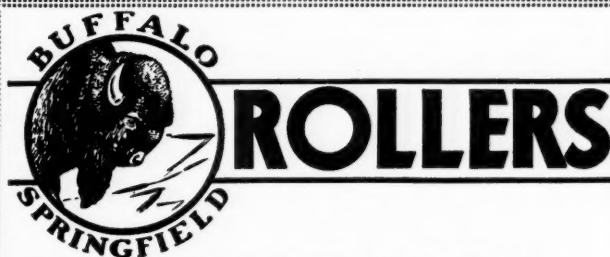
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A wide range of types in sizes 4" to 15"

For belt drive and for direct connection to motor  
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AUGUSTA, GA.



The buffalo head symbolizes strength and stamina . . .  
two essentials of any good road roller. When in the  
market think of the buffalo head . . . weigh these facts:

*Oldest make of rollers*

*Most universally used make*

*Not the lowest priced, but admitted to be  
the most dependable and longest lived  
roller your money can buy.*

Then specify a Buffalo-Springfield in the interests of  
ultimate economy of purchase.

*State your needs and have us suggest the  
type and size to conform.*

**THE BUFFALO-SPRINGFIELD  
ROLLER CO.**

SPRINGFIELD, OHIO  
Brisbane Bldg., Buffalo, N. Y.  
150 Nassau St., New York City



## WILLIAMS BUCKETS

*Dig Faster  
Dig Deeper*

Absolutely straight line reeving reduces  
upkeep cost

**THE WELLMAN ENGINEERING CO.**  
7003 Central Avenue, Cleveland, Ohio



**Owen Buckets**

Greater Digging Power  
Faster Operation  
Longer Life  
Guaranteed Against  
Breakage

**The OWEN BUCKET CO.**  
6015 BREAKWATER AVENUE, CLEVELAND, OHIO

They get  
**"A Mouthful at Every  
Bite" and More Bites  
Per Day**

## LARGEST PLANT

Filling,  
Land Reclamation,  
Canals  
and Port Work

River and Har-  
bor Improvements,  
Deep Waterways  
and Ship Channels.

*Correspondence Invited  
from Southern Officials  
and Corporate and Pri-  
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where.*

**NEW YORK**  
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## LONGEST EXPERIENCE

We are especially  
equipped to exe-  
cute all kinds of  
dredging, recla-  
mation and port  
works in South-  
ern waters.

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TO THE  
FEDERAL GOVERNMENT**

**Atlantic, Gulf and Pacific Company**

**HOUSTON**  
Scanlan Bldg.



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Carborundum Co., Niagara Falls, N. Y.

## ACCOUNTANTS and AUDITORS

Andrews, Harden & Co., Birmingham, Ala.

## AIR COMPRESSORS (Stationary and Portable.)

De Laval Steam Turbine Co., Trenton, N.J.  
General Electric Co., Schenectady, N. Y.  
Westinghouse Traction Brake Co., Wilmerding, Pa.

## ARCHITECTS.

Moyer Co., Tilghman, Allentown, Pa.

## ARCHITECTS' SUPPLIES.

Weber Co., Inc., F., Philadelphia, Pa.

## ASPHALT.

Gulf Refining Co., Pittsburgh, Pa.

## —Filler.

American Limestone Co., Knoxville, Tenn.

## —Paving.

Barber Asphalt Co., Philadelphia, Pa.

## BALLAST (Railroad.)

American Limestone Co., Knoxville, Tenn.

## BANKS and TRUST COMPANIES.

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Baltimore Trust Co., Baltimore, Md.  
First and Merchants National Bank, Richmond, Va.

## BARGES (Steel.)

American Bridge Co., Pittsburgh, Pa.  
McClintic-Marshall Corp., Bethlehem, Pa.

## BARS (Steel, Rounds, Flats, Hexagon and Squares.)

Carnegie Steel Co., Pittsburgh, Pa.  
Sweet's Steel Corp., Williamsport, Pa.  
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## BEAMS, CHANNELS, ANGLES.

Carnegie Steel Co., Pittsburgh, Pa.  
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Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.  
Virginia Bridge & Iron Co., Roanoke, Va.

## BILLETS (Basic Open Hearth.)

Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

## BLASTING POWDER and Accessories.

Du Pont de Nemours & Co., E. I., Wilmington, Del.

## BLINDS (Venetian and Awning.)

Wilson Corp., The J. G., New York.

## BLOCKS (Chain.)

Wright Mfg. Co., Bridgeport, Conn.

## BOILER REPAIRS.

Flanagan Co., Inc., J. J., Atlanta, Ga.

## BOILERS (New.)

Charleston Dry Dock & Machine Co., Charleston, S. C.  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Ole Mfg. Co., E. D., Newnan, Ga.  
Hedges Walah Weldner Co., Chattanooga, Tenn.  
Titusville Iron Works Co., Titusville, Pa.

## —(Used.)

Delta Equipment Co., Philadelphia, Pa.  
O'Brien Machinery Co., Philadelphia, Pa.

## BOILER SETTINGS.

Brooks-Fisher Co., Atlanta, Ga.

## —Tubes.

National Tube Co., Pittsburgh, Pa.

## BOLTS, Rivets, Studs, Washers.

Bethlehem Steel Co., Bethlehem, Pa.  
Progressive Mfg. Co., Torrington, Conn.  
Virginia Bridge & Iron Co., Roanoke, Va.

## —Bolts (Track.)

Sweet's Steel Co., Williamsport, Pa.

## BORINGS (Core.)

Kennedy-Riegger Drilling Co., New York.  
Mott Core Drilling Co., Huntington, W. Va.  
Pennsylvania Drilling Co., Pittsburgh, Pa.  
Sprague & Henwood, Inc., Scranton, Pa.

## BOXES (Paper.)

Old Dominion Box Co., Lynchburg, Va.

## BRICK (Common Building.)

Friend & Co., Inc., Petersburg, Va.

## —(Vitriified, Paving.)

National Paving Brick Assn., Washington, D. C.

## BRICK and CLAYWORKING MACHINERY.

Steele & Sons, J. C., Statesville, N. C.

## BRIDGE (Operating Machinery.)

Marle Gear & Machine Co., Phila., Pa.

## BRIDGE SLABS.

Kerlow Steel Flooring Co., Jersey City, N.J.

## BRIDGE STRINGERS (Timber Creosoted.)

American Creosote Wks., New Orleans, La.  
Atlantic Creosoting Co., Norfolk, Va.  
Ayer & Lord Tie Co., Chicago, Ill.  
Century Wood Preserving Co., Balto., Md.

## BRIDGES (Steel.)

American Bridge Co., Pittsburgh, Pa.  
Belmont Iron Works, Philadelphia, Pa.  
Bristol Steel & Iron Works, Inc., Bristol, Va.  
McClintic-Marshall Corp., Bethlehem, Pa.  
Roanoke Iron & Bridge Wks., Roanoke, Va.  
Virginia Bridge & Iron Co., Roanoke, Va.

## BUBBLERS.

Rundie-Spence Mfg. Co., Milwaukee, Wis.

## BUCKETS (Clam Shell.)

Owen Bucket Co., Cleveland, Ohio.  
Wellman Engr. Co., Cleveland, O.

## —(Coal.)

Owen Bucket Co., Cleveland, O.  
Wellman Engr. Co., Cleveland, O.

## —(Dredging, Excavating, Sewer, etc.)

Owen Bucket Co., Cleveland, Ohio.  
Wellman Engr. Co., Cleveland, O.

## —(Material Handling.)

Owen Bucket Co., Cleveland, O.  
Wellman Engr. Co., Cleveland, O.

## —(Ore Handling.)

Owen Bucket Co., Cleveland, Ohio.  
Wellman Engr. Co., Cleveland, O.

## —(Rehandling.)

Owen Bucket Co., Cleveland, O.  
Wellman Engr. Co., Cleveland, O.

## —(Sand and Gravel.)

Owen Bucket Co., Cleveland, O.  
Wellman Engr. Co., Cleveland, O.

## BUILDERS and Contractors.

Moyer Co., Tilghman, Allentown, Pa.

## BUILDING GRANITE

(Finished.)  
Gardner Bros., Salisbury, N. C.  
North Carolina Granite Corp., The Mount Airy, N. C.

## BUILDINGS (Industrial.)

McClintic-Marshall Corp., Bethlehem, Pa.  
Virginia Bridge & Iron Co., Roanoke, Va.

## BULKHEADS.

Shore-Line Builders, Inc., Jacksonville, Fla.

## BURLAP.

Fulton Bag & Cotton Mills, Atlanta, Ga.

## CABLE.

American Cable Co., New York, N. Y.

## —(Elevator.)

American Steel & Wire Co., Chicago, Ill.

## CABLE AND WIRE (Electric.)

American Steel & Wire Co., Balto., Md.  
Western Electric Co., New York, N. Y.

## CALCIUM CHLORIDE.

Grasselli Chemical Co., Inc., Birmingham.

## CANVAS.

Fulton Bag & Cotton Mills, Atlanta, Ga.

## CARS (Dump, Industrial, Logging and Mine.)

Southern Iron & Equipment Co., Atlanta.

## CASSIONS (Foundations, Water Wells, etc.)

United Welding Co., Middletown, O.

## CASTINGS (Alloy.)

Cincinnati Steel Castings Co., Cincinnati, Ohio.

## —(Brass, Bronze and Aluminum.)

Richmond Foundry & Mfg. Co., Richmond, Va.

## —(Gray Iron.)

Glamorgan Pipe & Fdy. Co., Lynchburg, Va.  
Jefferson Foundry Co., Birmingham, Ala.  
Richmond Foundry & Mfg. Co., Richmond, Va.  
Salem Fdry. & Mch. Wks., Salem, Va.

## —(Semi-Steel.)

Jefferson Foundry Co., Birmingham, Ala.  
Salem Fdry. & Mch. Wks., Salem, Va.

## —(Steel.)

Bethlehem Steel Co., Bethlehem, Pa.  
Cincinnati Steel Castings Co., Cincinnati, Ohio.  
Crucible Steel Casting Co., Landstown, Delaware Co., Pa.  
Lunkenheimer Co., Cincinnati, Ohio.

## CEMENT (Portland.)

Alpha Portland Cement Corp., Birmingham, Ala.

## CHEMICALS.

Grasselli Chemical Co., Inc., Birmingham.

## CHEMISTS, CHEMICAL ENGINEERS (Analytical.)

Froehling & Robertson, Inc., Richmond, Va.  
Hunt Co., Robert W., Chicago, Ill.  
Picard Laboratories, Birmingham, Ala.

## CHIMNEYS (Concrete.)

Rust Engineering Co., Birmingham, Ala.

## —(Radial Brick.)

Rust Engineering Co., Birmingham, Ala.

## CHUTES (Mail.)

Chuter Mail Chute Co., Rochester, N. Y.

## CIRCUIT BREAKERS.

Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

## COAL (Bituminous.)

Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

## COAL and Ash-Handling Mchry.

Shepard Niles Crane & Hoist Corp., Montour Falls, N. Y.

## —Tipples.

American Bridge Co., Pittsburgh, Pa.  
Virginia Bridge & Iron Co., Roanoke, Va.

## COKE.

Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

## CONCRETE Construction (Reinforced.)

Rust Engineering Co., Birmingham, Ala.

## CONCRETE MIXERS.

Dunning & Boschert Press Co., Inc., Syracuse, N. Y.  
Jaeger Machine Co., Columbus, Ohio.

## CONDENSERS.

Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

## CONDUITS (Electric, Interior, Steel.)

Western Electric Co., New York, N. Y.

## CONTRACTORS (Bridge.)

Hardaway Contracting Co., Columbus, Ga.  
Snare Corp., Frederick, New York, N. Y.

## —(Drainage and Dredging.)

Arnold Corp., The Baltimore, Md.  
Atlantic Gulf and Pacific Co., New York.

## —Drilling.

Kennedy-Blogger Drilling Co., New York City.  
Mott Core Drilling Co., Huntington, W. Va.  
Pennsylvania Drilling Co., Pittsburgh, Pa.  
Sprague & Henwood, Inc., Scranton, Pa.

## —(Electrical.)

Walker Electrical Co., Atlanta, Ga.  
Warner Service Co., Knoxville, Tenn.  
Webb Electric Co., Anderson, S. C.

## —(Foundations and Dams.)

Snare Corp., Frederick, New York, N. Y.

## CONTRACTORS (General.)

Blair, Algernon, Montgomery, Ala.  
Burke, Inc., J. V. & B. T., New Orleans.  
Cornell Young Co., Inc., Macon, Ga.  
Flake-Carter Constr. Co., Greenville, S. C.

## —(Industrial Buildings.)

Blair, Algernon, Montgomery, Ala.  
Flake-Carter Constr. Co., Greenville, S. C.  
Lockwood Greene Engrs., Inc., Boston.

## —(Marble.)

Thrower Marble & Tile Co., Charlotte, N. C.

## —(Power Piping.)

Pittsburgh Piping & Equip. Co., Pittsburgh, Pa.

## —(Railroad.)

Cornell-Young Co., Inc., Macon, Ga.

## —(Reinforced Concrete.)

Blair, Algernon, Montgomery, Ala.

## —(Road and Street Paving.)

Flake-Carter Constr. Co., Greenville, S. C.  
McCrory Co., J. B., Atlanta, Ga.

## —Rubble Stone

Brown, Jas. W., Greensboro, N. C.

## —(Sewerage and Waterworks.)

Hardaway Contracting Co., Columbus, Ga.  
Layne & Bowler, Inc., Memphis, Tenn.  
McCrory Co., J. B., Atlanta, Ga.  
Snare Corp., Frederick, New York, N. Y.

## —(Sprinkler System.)

Poe Piping & Heating Co., Greenville, S. C.

## —Stone, Cut

Brown, Jas. W., Greensboro, N. C.

## —Structural Steel.

Stewart, Harvey H., Charlotte, N. C.

## —(Tile.)

Thrower Marble & Tile Co., Charlotte, N. C.

## CONTRACTORS MACHINERY and SUPPLIES.

(Used.)  
Equipment Corp. of America, Chicago, Ill.  
Lima Excavator Sales Agency, Lima, Ohio.  
Marine Metal & Supply Co., New York.

## CONTRACT WORK WANTED.

(See following classifications:)  
Castings.  
Foundries and Machine Shops.  
Machinery (Special).  
Ornamental Iron Work.  
Patterns (Drawing, etc.)  
Sheet Metal Work.  
Structural Steel and Iron.

## CONVEYING and ELEVATING MACHINERY.

Cleveland Crane & Engr. Co., Wickliffe, Ohio.  
Shepard Niles Crane & Hoist Corp., Montour Falls, N. Y.

## CRANES.

Austin-Western Road Mchry. Co., Chicago, Ill.  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.

## —(Crawler.)

Austin-Western Road Machinery Co., Chicago, Ill.  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.

## —(Crawling Tractor.)

Austin-Western Road Mchry. Co., Chicago, Ill.

## —(Electric Traveling.)

Shepard Niles Crane & Hoist Corp., Montour Falls, N. Y.

## —(Full Circle Steam and Electric.)

Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.

## —(Gasoline.)

Austin-Western Road Mchry. Co., Chicago, Ill.  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.

## —(Jib.)

Shepard Niles Crane & Hoist Corp., Montour Falls, N. Y.

## —(Locomotive.)

Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.

## —(Material Handling.)

Austin-Western Road Mchry. Co., Chicago, Ill.  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.

## —(Traveling, hand power.)

Shepard Niles Crane & Hoist Corp., Montour Falls, N. Y.  
Wright Mfg. Co., Bridgeport, Conn.

- CREOSOTE OIL.**  
American Creosote Wks., New Orleans, La.  
Ayer & Lord Tie Co., Chicago, Ill.
- CREOSOTED WOOD MATERIALS.**  
American Creosote Wks., New Orleans, La.  
Atlantic Creosoting Co., Norfolk, Va.  
Ayer & Lord Tie Co., Chicago, Ill.  
Century Wood Preserving Co., Balto., Md.  
Eppinger & Russell Co., New York, N. Y.  
Gulf States Creos. Co., Hattiesburg, Miss.  
National Lumber & Creosoting Co., Texarkana, Ark.-Tex.
- CROSS ARMS, TIES (Creosoted.)**  
American Creosote Wks., New Orleans, La.  
Atlantic Creosoting Co., Norfolk, Va.  
Ayer & Lord Tie Co., Chicago, Ill.  
Century Wood Preserving Co., Balto., Md.  
Eppinger & Russell Co., New York, N. Y.
- CRUSHED STONE (Road Concrete and Ballast.)**  
American Limestone Co., Knoxville, Tenn.  
Boxley & Co., W. W., Roanoke, Va.  
Culbert & Sons, W. F., Marion, Va.
- CRUSHERS (Rock.)**  
Gruendler Crusher & Pulverizer Co., St. Louis, Mo.
- CRUSHING and Pulverizing Machinery.**  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
Austin-Western Road Machinery Co., Chicago, Ill.  
Gruendler Crusher & Pulverizer Co., St. Louis, Mo.
- CULVERT PIPE (Cast Iron.)**  
Cast Iron Pipe Research Assn., Chicago.
- (Corrugated Metal.)**  
American Sheet & Tin Plate Co., Pittsburgh, Pa.
- CYLINDERS (Compressed Air, Gas.)**  
National Tube Co., Pittsburgh, Pa.
- DITCHING MACHINERY.**  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.
- DOORS (Cabinet Woodwork.)**  
Mitchell Mfg. Co., Robert, Cincinnati, O.
- (Fireproof, Air Chamber.)**  
Wilson Corp., The J. G., New York.
- (Rolling, Steel and Wood.)**  
Wilson Corp., The J. G., New York.
- (Vault.)**  
York Safe & Lock Co., York, Penna.
- DRAFTSMEN'S SUPPLIES.**  
Weber Co., Inc., P., Philadelphia, Pa.
- DRAGLINE EXCAVATORS.**  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.
- DREDGING (River and Harbor Improvement.)**  
Arundel Corp., The, Baltimore, Md.  
Atlantic Gulf and Pacific Co., New York.
- DRILLS (Diamond and Shot Core.)**  
Sprague & Henwood, Inc., Scranton, Pa.
- (Oil and Artesian Well.)**  
Virginia Machinery & Well Co., Inc., Richmond, Va.
- DRINKING FOUNTAINS.**  
Rundle-Spence Mfg. Co., Milwaukee, Wis.
- DYNAMITE (Industrial and Agricultural.)**  
Du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
- ELECTRICAL Instruments and Supplies.**  
General Electric Co., Schenectady, N. Y.  
Western Electric Co., New York, N. Y.
- ELECTRICAL MACHINERY (Generators, Motors, etc., New.)**  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
Fairbanks, Morse & Co., Chicago, Ill.  
General Electric Co., Schenectady, N. Y.  
Partridge, Arthur S., St. Louis, Mo.  
Rockford Power Machy. Co., Rockford, Ill.
- (Generators, Motors, etc., Used.)**  
Delta Equipment Co., Philadelphia, Pa.  
Electric Service Co., Cincinnati, Ohio.  
General Electric Co., Schenectady, N. Y.  
O'Brien Machinery Co., The, Phila., Pa.  
Reading Engineering Wks., Reading, Pa.  
Rockford Power Machy. Co., Rockford, Ill.
- Repairing (Motors, Generators, etc.)**  
Electric Service Co., Cincinnati, Ohio.
- ELECTRIC LIGHTING.**  
General Electric Vapor Lamp Co., Hoboken, N. J.  
Westinghouse Lamp Co., New York City.
- ELECTRICAL MACHINERY (Generators, Motors, etc., New.)**  
Fairbanks, Morse & Co., Chicago, Ill.  
Partridge, Arthur S., St. Louis, Mo.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.
- ELEVATORS (Electric.)**  
Millner Co., St. Louis, Mo.
- (Hand and Belt Power.)**  
Millner Co., St. Louis, Mo.
- ENGINEERS (Airports.)**  
Lockwood Greene Engrs., Inc., New York.
- (Appraisal.)**  
Main, Inc., Chas. T., Boston, Mass.  
Wiedeman and Singleton, Inc., Atlanta.
- (Bridge.)**  
Gardner & Howe, Memphis, Tenn.  
Hardway Contracting Co., Columbus, Ga.  
Hedrick, Inc., Ira G., Hot Springs, Nat'l Park, Ark.  
Steel & Leiby, Knoxville, Tenn.  
Virginia Bridge & Iron Co., Roanoke, Va.  
Wiley & Wilson, Lynchburg, Va.
- (Chemical.)**  
Dow, A. W., New York.  
Pleard Laboratories, Birmingham, Ala.
- (Civil.)**  
Saxe, Van Rensselaer P., Baltimore, Md.  
Spring, Chas. Herbert, Greensboro, N. C.  
Steel & Leiby, Knoxville, Tenn.  
Wiley & Wilson, Lynchburg, Va.
- (Consulting.)**  
Converse & Co., J. B., Mobile, Ala.  
Engineering Service Corp., Houston, Tex.  
Goder, Joseph, Chicago, Ill.  
Hedrick, Inc., Ira G., Hot Springs, Nat'l Park, Ark.  
Saxe, Van Rensselaer P., Baltimore, Md.  
Wiedeman & Singleton, Inc., Atlanta, Ga.  
Wiley & Wilson, Lynchburg, Va.
- (Dams.)**  
Gardner & Howe, Memphis, Tenn.  
Hedrick, Inc., Ira G., Hot Springs, Nat'l Park, Ark.  
Lee Engineering Corp., William S., Charlotte, N. C.  
Wiley & Wilson, Lynchburg, Va.
- (Electrical.)**  
Engineering Service Corp., Houston, Tex.  
Webb Electric Co., Anderson, S. C.  
Wiley & Wilson, Lynchburg, Va.
- (Electric Light and Power.)**  
Byllesby Engineering and Management Corp., Chicago, Ill.  
Lee Engineering Corp., William S., Charlotte, N. C.  
Wiley & Wilson, Lynchburg, Va.
- (Gas.)**  
Byllesby Engineering and Management Corp., Chicago, Ill.
- (Geological.)**  
Froehling & Robertson, Inc., Richmond, Va.
- (Harbor Improvements.)**  
Engineering Service Corp., Houston, Tex.
- (Heating.)**  
Wiley & Wilson, Lynchburg, Va.
- (Hydraulic.)**  
Wiley & Wilson, Lynchburg, Va.
- (Hydro-electric.)**  
Byllesby Engineering and Management Corp., Chicago, Ill.  
Lee Engineering Corp., William S., Charlotte, N. C.  
Wiley & Wilson, Lynchburg, Va.
- (Ice and Refrigerating.)**  
Engineering Service Corp., Houston, Tex.
- (Industrial Plants.)**  
Converse & Co., J. B., Mobile, Ala.  
Gardner & Howe, Memphis, Tenn.  
Lockwood Greene Engrs., Inc., New York.  
Main, Inc., Chas. T., Boston, Mass.  
Wiley & Wilson, Lynchburg, Va.
- (Industrial Survey.)**  
Converse & Co., J. B., Mobile, Ala.  
Lockwood Greene Engrs., Inc., New York.
- (Inspection and Tests.)**  
Dow, A. W., New York.  
Froehling & Robertson, Inc., Richmond, Va.  
Hunt Co., Robert W., Chicago, Ill.  
McCallum Inspection Co., Norfolk, Va.  
Pleard Laboratories, Birmingham, Ala.
- (Lighting.)**  
General Electric Vapor Lamp Co., Hoboken, N. J.  
Westinghouse Lamp Co., New York City.  
Wiley & Wilson, Lynchburg, Va.
- (Mechanical.)**  
Wiley & Wilson, Lynchburg, Va.
- (Mining. See Engineers, Geological.)**
- (Municipal.)**  
Harrub Engr. Co., C. N., Nashville, Tenn.  
McCrory Co., The J. B., Atlanta, Ga.  
Wiley & Wilson, Lynchburg, Va.
- (Paving and Roads.)**  
Dow, A. W., New York.  
Harrub Engr. Co., C. N., Nashville, Tenn.
- (Public Service Properties.)**  
Byllesby Engineering and Management Corp., Chicago, Ill.  
Main, Inc., Chas. T., Boston, Mass.
- (Reinforced Concrete Bridges, Buildings, etc.)**  
Saxe, Van Rensselaer P., Baltimore, Md.  
Steel & Leiby, Knoxville, Tenn.
- (Sanitary.)**  
Wiley & Wilson, Lynchburg, Va.
- (Sewage Disposal Plants.)**  
McCrory Co., The J. B., Atlanta, Ga.  
Wiley & Wilson, Lynchburg, Va.
- (Sewerage and Waterworks.)**  
Harrub Engr. Co., C. N., Nashville, Tenn.  
Wiedeman & Singleton, Inc., Atlanta, Ga.  
Wiley & Wilson, Lynchburg, Va.
- (Structural.)**  
Saxe, Van Rensselaer P., Baltimore, Md.  
Virginia Bridge & Iron Co., Roanoke, Va.
- (Textile Mills.)**  
Lockwood Greene Engrs., Inc., New York.  
Main, Inc., Chas. T., Boston, Mass.
- (Ventilating and Heating.)**  
Wiley & Wilson, Lynchburg, Va.
- (Water Supply.)**  
Wiley & Wilson, Lynchburg, Va.
- ENGINES (Compressed Air.)**  
Dake Engine Co., Grand Haven, Mich.
- (Diesel Type.)**  
Fairbanks, Morse & Co., Chicago, Ill.  
Superior Engine Co., Springfield, O.
- (Gas and Gasoline.)**  
Sterling Engine Co., Buffalo, N. Y.
- (Marine.)**  
Fairbanks, Morse & Co., Chicago, Ill.
- (Steam.)**  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.
- ENVELOPES.**  
Young & Selden Co., Baltimore, Md.
- ERECTOR (Structural Steel.)**  
Stewart, Harvey H., Charlotte, N. C.
- ESTIMATORS (Building & Construction.)**  
Spring, Chas. Herbert, Greensboro, N. C.
- EXCAVATING MACHINERY.**  
Austin-Western Road Machinery Co., Chicago, Ill.  
Northwest Engineering Co., Chicago, Ill.  
Owen Bucket Co., The, Cleveland, Ohio.
- EXCAVATORS (Clamshell and Orange Peel.)**  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.
- (Dragline. See Dragline Excavators.)**
- (Trench.)**  
Ohio Power Shovel Co., Lima, Ohio.
- EXPLOSIVES.**  
Du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.
- FEED-WATER HEATERS and Purifiers.**  
American Water Softener Co., Phila., Pa.  
International Filter Co., Chicago, Ill.
- FENCING, ENTRANCE GATES (Iron, Steel and Wire.)**  
American Steel and Wire Co., Balto., Md.  
Cyclone Fence Co., Waukegan, Ill.
- FENCING (Field and Industrial, Wire Woven.)**  
American Steel and Wire Co., Balto., Md.  
Cyclone Fence Co., Waukegan, Ill.
- FERTILIZER Mixing Plants.**  
Gruendler Crusher & Pulverizer Co., St. Louis, Mo.
- FILTERS (For Domestic and Industrial Purposes.)**  
American Water Softener Co., Phila., Pa.  
Bacharach & Co., E. W., Kansas City, Mo.  
International Filter Co., Chicago, Ill.  
Roberts Filter Mfg. Co., Darby (Phila.).
- FINANCING.**  
Electric Bond & Share Co., New York.
- FIREPROOF Doors and Shutters**  
Wilson Corp., The J. G., New York City.
- FITTINGS (Wire Rope.)**  
American Steel & Wire Co., Chicago, Ill.
- FLANGES (Iron and Steel.)**  
Dart Mfg. Co., E. M., Providence, R. I.
- FLOOR (Asphalt Mastic.)**  
Barber Asphalt Co., Philadelphia, Pa.
- (Northern Hard Maple.)**  
Holt Hardwood Co., Oconto, Wis.
- (Open Steel.)**  
Kerlow Steel Flooring Co., Jersey City, N. J.
- FLOOR Plates and Stair Treads.**  
Central Iron & Steel Co., Harrisburg, Pa.
- FLOOR SURFACING (Concrete, Wood, etc.)**  
Union Products Co., Cleveland, Ohio.
- FOUNDRIES and Machine Shops.**  
General Machine Works, York, Pa.  
Glamorgan Pipe & Fdy. Co., Lynchburg, Va.  
Richmond Foundry & Mfg. Co., Richmond, Va.
- FOUNDRY Equipment and Supplies.**  
Hill & Griffith Co., Cincinnati, O.
- FOUNDRY FACINGS (Tale and Soapstone.)**  
Hill & Griffith Co., Cincinnati, O.
- GALVANIZED Products.**  
Cattle & Bros., Jos. P., Philadelphia, Pa.
- Steel and Iron.**  
American Sheet & Tin Plate Co., Pittsburgh, Pa.
- GAS (Domestic, Industrial Use.)**  
American Gas Assn., New York, N. Y.  
Associated Gas & Elec. System, New York, N. Y.
- GAS HOLDERS.**  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.  
McClintic-Marshall Corp., Bethlehem, Pa.
- GASOLINE and KEROSENE.**  
Gulf Refining Co., Pittsburgh, Pa.
- GEARS.**  
Earle Gear & Machine Co., Phila., Pa.  
General Electric Co., Schenectady, N. Y.
- GENERATORS, MOTORS (New.)**  
General Electric Co., Schenectady, N. Y.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.
- (Used.)**  
O'Brien Machinery Co., Phila., Pa.
- GEOLOGISTS. (See Engineers Geological.)**
- GLASS. (Window.)**  
Pittsburgh Plate Glass Co., Pittsburgh.
- GRADERS (Elevating.)**  
Austin-Western Road Machinery Co., Chicago, Ill.  
Caterpillar Tractor Co., Peoria, Ill.  
Gallon Iron Wks. & Mfg. Co., Gallon, O.
- GRANITE (Building and Monumental.)**  
Gardner Brothers, Salisbury, N. C.  
North Carolina Granite Corp., The, Mount Airy, N. C.
- GRATING (Area, Flooring, Side-walk.)**  
Kerlow Steel Flooring Co., Jersey City, N. J.
- GRAVEL (Roofing and Road.)**  
American Limestone Co., Knoxville, Tenn.  
Arundel Corp., The, Baltimore, Md.  
Boxley & Co., W. W., Roanoke, Va.  
Friend & Co., Inc., Petersburg, Va.
- GREASE Cups.**  
Lunkemheimer Co., The, Cincinnati, O.
- GRILLES (Brass, Bronze, Steel, etc.)**  
Manhattan Perforated Metal Co., Inc., Long Island City, N. Y.
- GRINDERS WHEELS.**  
Carborundum Co., Niagara Falls, N. Y.
- GUARD RAIL (Road.)**  
National Traffic Guard Co., Atlanta, Ga.
- GUNPOWDER.**  
Du Pont de Nemours & Co., E. I., Wilmington, Del.
- GUNS (Hydraulic.)**  
Georgia Iron Works, Augusta, Ga.
- HARBOR IMPROVEMENTS.**  
Arundel Corp., Baltimore, Md.  
Atlantic Gulf & Pacific Co., New York.
- HEATERS (Asphalt.)**  
Hoschert Co., Jos., Cincinnati, O.
- HOISTS (Chain.)**  
Cleveland Crane & Engr. Co., Wickliffe, O.  
Wright Mfg. Co., Bridgeport, Conn.
- (Electric, Gasoline.)**  
Dake Engine Co., Grand Haven, Mich.



- (Steam.)  
Dake Engine Co., Grand Haven, Mich.
- HOTELS.**  
Southern Hotel, The, Baltimore, Md.
- HYDRANTS (Fire.)**  
Myers & Bros. Co., The, F. E. Ashland, Ohio
- HYDRO - ELECTRIC POWER COMPANIES (Offering Industrial and Commercial Opportunities.)**  
Crisp County Power Commission, Cordele, Ga.
- INCINERATORS.**  
Brooks-Fisher Co., Atlanta, Ga.  
D-N Corporation, New York, N. Y.  
Goder, Joseph, Chicago, Ill.
- INCORPORATORS.**  
Delaware Registration Trust Co., Wilmington, Del.
- INSULATING Materials**  
General Electric Co., Schenectady, N. Y.
- Quilt.  
Cabot, Inc., Samuel, Boston, Mass.
- INVESTMENT SECURITIES.**  
Electric Bond & Share Co., New York.
- JAIL CELLS.**  
Roanoke Iron & Bridge Wks., Roanoke, Va.
- KETTLES (Pavers and Roofers.)**  
Honhorst Co., Jos., Cincinnati, O.
- LADDERS (Rolling.)**  
Myers & Bros. Co., The, F. E. Ashland, O.
- LAMPS (Incandescent.)**  
General Electric Vapor Lamp Co., Hoboken, N. J.  
Western Electric Co., New York, N. Y.  
Westinghouse Lamp Co., New York City.
- LIGHTING (Factory and Mill.)**  
General Electric Vapor Lamp Co., Hoboken, N. J.  
Westinghouse Lamp Co., New York City.
- Fixtures (Electric.)  
Western Electric Co., New York City.  
Westinghouse Lamp Co., New York City.
- LININGS (Fire, Fire Clay.)**  
Lee Clay Products Co., Clearfield, Ky.  
Owensboro Sewer Pipe Co., Owensboro, Ky.
- LITHOGRAPHERS and ENGRAVERS.**  
Smith & Son Co., Oscar T., Balto., Md.  
Young & Selden Co., Baltimore, Md.
- LOADING and UNLOADING MACHINERY (Portable.)**  
Northwest Engineering Co., Chicago, Ill.
- LOCOMOTIVES. (Gasoline.)**  
Whitcomb Locomotive Co., Rochelle, Ill.
- (Industrial.)  
Southern Iron & Equipment Co., Atlanta.  
Whitcomb Locomotive Co., Rochelle, Ill.
- (Mining.)  
Whitcomb Locomotive Co., Rochelle, Ill.
- (Railway.)  
Southern Iron & Equipment Co., Atlanta.  
Whitcomb Locomotive Co., Rochelle, Ill.
- LUBRICANTS.**  
Gulf Refining Co., Pittsburgh, Pa.
- LUBRICATORS (Force Feed.)**  
Lunkenheimer Co., The, Cincinnati, O.
- LUMBER (Creosoted.)**  
Amer. Creosote Wks., Inc., New Orleans.  
Atlantic Creosoting Co., Norfolk, Va.  
Ayer & Lord Tie Co., Inc., Chicago, Ill.  
Century Wood Preserving Co., Balto., Md.  
Eppinger & Russell Co., New York, N. Y.  
Gulf States Creos. Co., Hattiesburg, Miss.  
National Lumber & Creosoting Co., Texarkana, Ark.-Tex.
- MACHINERY (Special.)**  
Bertsch & Co., Cambridge City, Ind.  
Earle Gear & Machine Co., Phila., Pa.  
General Machine Works, York, Pa.  
Gerding Bros., Cincinnati, O.
- MACHINERY and Supplies (New and Used.)**  
Electric Service Co., Cincinnati, Ohio.  
Marine Metal & Supply Co., New York.  
O'Brien Machinery Co., The, Phila., Pa.  
Partridge, Arthur S., St. Louis, Mo.  
Reading Engineering Wks., Reading, Pa.
- MACHINE TOOLS. (Used.)**  
Delta Equipment Co., Philadelphia, Pa.  
O'Brien Machinery Co., Philadelphia, Pa.
- MAIL CHUTES.**  
Cutter Mail Chute Co., Rochester, N. Y.
- MARBLE (Producers and Manufacturers.)**  
Georgia Marble Co., The, Tate, Ga.
- METAL Cutting Machinery.**  
Earle Gear & Machine Co., Phila., Pa.
- METAL STAMPING.**  
Gerding Bros., Cincinnati, O.
- MIXERS (Plaster and Mortar.)**  
Dunning & Boschert Press Co., Syracuse, N. Y.  
Jaeger Machine Co., Columbus, Ohio.
- MOTORS (Electric.)**  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
Fairbanks, Morse & Co., Chicago, Ill.  
General Electric Co., Schenectady, N. Y.  
Western Electric Co., New York City.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.
- MOTOR TRUCKS.**  
International Harvester Co. of America, Inc., Chicago, Ill.
- NAILS and Spikes.**  
American Steel & Wire Co., Balto., Md.  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
- OIL (Fuel and Gas.)**  
Gulf Refining Co., Pittsburgh, Pa.
- Cups.  
Lunkenheimer Co., The, Cincinnati, O.
- ORE-WASHING MACHINERY.**  
Georgia Iron Works, Augusta, Ga.
- ORNAMENTAL Iron Work.**  
Austin Bros. Bridge Co., Atlanta, Ga.  
Roanoke Iron & Bridge Wks., Roanoke, Va.  
Sneed Architectural Iron Works, Louisville, Ky.  
Virginia Bridge & Iron Co., Roanoke, Va.
- PAINT (Preservative.)**  
Cabot, Inc., Samuel, Boston, Mass.
- PARTITIONS (Sectionfold, Rolling, Wood.)**  
Wilson Corp., The, J. G., New York.
- PATENT ATTORNEYS.**  
Buck, Sterling F., Washington, D. C.  
Coleman, Watson E., Washington, D. C.  
Eaton, Paul B., Charlotte, N. C.  
Sannett, Edward C., Washington, D. C.  
Seymour & Bright, Washington, D. C.
- PAVING (Asphaltic Concrete.)**  
Culbert & Sons, W. F., Marion, Va.
- PAVING Blocks (Creosoted Wood.)**  
American Creosote Works, New Orleans.  
Ayer & Lord Tie Co., Chicago, Ill.  
Century Wood Preserving Co., Balto., Md.
- PAVING BRICK.**  
National Paving Brick Assn., Washington, D. C.
- PENSTOCKS.**  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.
- PERFORATED METAL.**  
Erdie Perforating Co., Rochester, N. Y.  
Harrington & King Perftg. Co., Chicago, Ill.  
Manhattan Perforated Metal Co., Inc., Long Island City, N. Y.  
Mundt & Sons, Charles, Jersey City, N. J.
- PETROLEUM REFINERS.**  
Gulf Refining Co., Pittsburgh, Pa.
- PIG-IRON.**  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
- PILES, POSTS, Poles (Creosoted.)**  
American Creosote Wks., New Orleans, La.  
Atlantic Creosoting Co., Norfolk, Va.  
Ayer & Lord Tie Co., Chicago, Ill.  
Century Wood Preserving Co., Balto., Md.  
National Lumber & Creosoting Co., Texarkana, Ark.-Tex.
- PILING—(Steel Sheet.)**  
Carnegie Steel Co., Pittsburgh, Pa.
- (Yellow Pine.)  
Century Wood Preserving Co., Balto., Md.
- PIPE.**  
Albert & Davidson Pipe Corp., Brooklyn, N. Y.  
Albert Pipe Sup. Co., Inc., Brooklyn, N. Y.  
Central Pipe & Supply Co., Charleston, W. Va.  
Greenpoint Iron & Pipe Co., Brooklyn, N. Y.  
Maryland Pipe & Steel Corp., Baltimore, Md.  
McDowell Pipe Corp., Brooklyn, N. Y.  
National Tube Co., Pittsburgh, Pa.  
Pittsburgh Piping & Equip. Co., Pittsburgh, Pa.  
Standard Piping & Fitting Co., Phila.  
Tri State Pipe Co., Bellaire, Ohio.
- (Cast Iron.)  
Cast Iron Pipe Research Assn., Chicago.  
Glamorgan Pipe & Fdry. Co., Lynchburg, Va.
- (Hammer-Welded.)  
National Tube Co., Pittsburgh, Pa.
- (Second-Hand.)  
Albert & Davidson Pipe Corp., Brooklyn, N. Y.  
Albert Pipe Sup. Co., Brooklyn, N. Y.  
Central Pipe & Supply Co., Charleston, W. Va.  
Greenpoint Iron & Pipe Co., Brooklyn, N. Y.  
Marine Metal & Supply Co., New York.  
Maryland Pipe & Steel Corp., Baltimore, Md.  
McDowell Pipe Corp., Brooklyn, N. Y.  
Tri State Pipe Co., Bellaire, Ohio.
- (Steel.)  
Bethlehem Steel Co., Bethlehem, Pa.  
National Tube Co., Pittsburgh, Pa.  
Pittsburgh Piping & Equip. Co., Pittsburgh, Pa.  
Standard Piping & Fitting Co., Phila.  
Youngtown Sheet & Tube Co., Youngstown, Ohio.
- PIPE (Fittings.)**  
Georgia Iron Works, Augusta, Ga.  
Standard Piping & Fitting Co., Phila.
- PIPE Machinery (Concrete.)**  
Quinn Wire & Iron Works, Boone, Iowa.
- Unions and Joints.  
Dart Mfg. Co., E. M., Providence, R. I.
- Systems (Industrial.)  
Moore Pipe & Sprinkler Co., Jacksonville, Fla.  
Pittsburgh Piping & Equip. Co., Pittsburgh, Pa.  
Standard Piping & Fitting Co., Phila.
- PLATES (Steel and Iron.)**  
Bethlehem Steel Co., Bethlehem, Pa.  
Carnegie Steel Co., Pittsburgh, Pa.  
Central Iron & Steel Co., Harrisburg, Pa.  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
- POLES—(Tubular, Steel.)**  
National Tube Co., Pittsburgh, Pa.
- (Yellow Pine.)  
Century Wood Preserving Co., Balto., Md.
- POLISHING MACHINERY.**  
(Wheels, Blocks.)  
Carborundum Co., Niagara Falls, N. Y.
- PORCH COLUMNS (Wood.)**  
Schwerdt Mfg. Co., A. F., Pittsburgh.
- PORTLAND CEMENT.**  
Alpha Portland Cement Co., Birmingham, Ala.
- PRESSES. (Baling, Cottonseed Oil, Hydraulic and Power.)**  
Dunning & Boschert Press Co., Inc., Syracuse, N. Y.
- PRINTERS (Book, Catalog, Job.)**  
Smith & Son Co., Oscar T., Baltimore, Md.  
Young & Selden Co., Baltimore, Md.
- PULVERIZERS. (See Crushing and Pulverizing Machinery.)**
- PUMPING MACHINERY.**  
Fairbanks, Morse & Co., Chicago, Ill.  
Layne & Bowler, Inc., Memphis, Tenn.  
Myers & Bros. Co., The, F. E. Ashland, O.  
Virginia Mch. & Well Co., Richmond, Va.
- PUMPS (Boiler Feed.)**  
DeLaval Steam Turbine Co., Trenton, N. J.  
Myers & Bros. Co., The, F. E. Ashland, O.
- (Centrifugal.)  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
DeLaval Steam Turbine Co., Trenton, N. J.  
Fairbanks, Morse & Co., Chicago, Ill.  
Layne & Bowler, Inc., Memphis, Tenn.
- (Deep Well.)  
Layne & Bowler, Inc., Memphis, Tenn.
- (Hydraulic.)  
Dunning & Boschert Press Co., Inc., Syracuse, N. Y.
- (Pulverized Coal.)  
Fuller Lehigh Co., Fullerton, Pa.
- (Sand and Dredging.)  
Georgia Iron Works, Augusta, Ga.
- (Steam.)  
Fairbanks, Morse & Co., Chicago, Ill.
- (Water Works.)  
Layne & Bowler, Inc., Memphis, Tenn.
- PUNCHING AND SHEARING MACHINERY.**  
Bertsch & Co., Cambridge City, Ind.
- RADIATOR ENCLOSURES.**  
Manhattan Perforated Metal Co., Inc., Long Island City, N. Y.
- RAILROAD Equipment and Supplies (New.)**  
Robinson & Orr, Pittsburgh, Pa.
- Equipment and Supplies.  
(Used.)  
Dyer Co., W. R., St. Louis, Mo.
- Smith & Co., W. M., Birmingham, Ala.  
Southern Iron and Equip. Co., Atlanta.
- RAILROAD (Frogs and Switches)**  
Bethlehem Steel Co., Bethlehem, Pa.  
Robinson & Orr, Pittsburgh, Pa.
- RAILROADS — (Offering Industrial, Agricultural and Commercial Opportunities.)**  
Model Land Company, Flagler System, St. Augustine, Fla.
- RAILS (New and Used.)**  
Carnegie Steel Co., Pittsburgh, Pa.  
Dyer Co., W. R., St. Louis, Mo.  
Robinson & Orr, Pittsburgh, Pa.  
Smith & Co., W. M., Birmingham, Ala.  
Southern Iron & Equip. Co., Atlanta, Ga.  
Sweet's Steel Co., Williamsport, Pa.  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
- RAILWAYS (Marine.)**  
Charleston Dry Dock and Machine Co., Charleston, S. C.
- RECEPTACLES (Self-Closing—Waste Paper.)**  
Whitaker Paper Co., Baltimore, Md.
- REINFORCING for Concrete.**  
American Steel and Wire Co., Balto., Md.  
Austin Bros. Bridge Co., Atlanta, Ga.  
Carnegie Steel Co., Pittsburgh, Pa.
- RIVER & HARBOR IMPROVEMENTS (Dredging, Docks, Wharves, etc.)**  
Arundel Corp., Baltimore, Md.  
Atlantic Gulf and Pacific Co., New York.
- ROAD and Street Machinery.**  
Austin-Western Road Machinery Co., Chicago, Ill.  
Buffalo-Springfield Roller Co., Springfield, O.  
Caterpillar Tractor Co., Peoria, Ill.  
Gallon Iron Wks. & Mfg. Co., Gallon, O.
- and Street Material.  
Boxley & Co., W. W., Roanoke, Va.
- Graders and Scrapers.  
Austin-Western Road Machinery Co., Chicago, Ill.  
Caterpillar Tractor Co., Peoria, Ill.  
Gallon Iron Wks. & Mfg. Co., Gallon, O.
- Oils and Preservatives.  
Gulf Refining Co., Pittsburgh, Pa.
- Rollers (Steam and Gasoline.)  
Austin-Western Road Machinery Co., Chicago, Ill.  
Buffalo-Springfield Roller Co., Springfield, O.
- Scarfing.  
Austin-Western Road Mchry. Co., Chicago, Ill.  
Buffalo-Springfield Roller Co., Springfield, O.
- ROOFING (Asphalt Built-Up.)**  
Barber Asphalt Co., Philadelphia, Pa.
- (Ready Prepared, Felt, Tar Asbestos, Asphalt.)  
Ruberoid Co., New York City.
- ROOFING and Siding (Composition.)**  
Ruberoid Co., New York City.
- (Metal.)  
American Sheet and Tin Plate Co., Pittsburgh, Pa.  
Gulf States Steel Co., Birmingham, Ala.  
Youngtown Sheet and Tube Co., Youngstown, O.
- SAFES.**  
York Safe & Lock Co., York, Penna.
- SAND.**  
Arundel Corp., Baltimore, Md.  
Friend & Co., Inc., Petersburg, Va.
- SANITARY Drinking Fountains.**  
Rundle-Spence Mfg. Co., Milwaukee, Wis.
- SAWS (Cold Metal.)**  
Earle Gear and Machine Co., Phila., Pa.
- SCALES (Auto Truck.)**  
Fairbanks, Morse & Co., Chicago, Ill.
- SCRAP IRON AND STEEL.**  
Smith & Co., W. M., Birmingham, Ala.
- SCREEN CLOTH.**  
Seneca Wire & Mfg. Co., Fostoria, Ohio.
- SCREENING (For Concrete and Road Construction.)**  
American Limestone Co., Knoxville, Tenn.
- SCREENS (Sand, Gravel, Stone, Coal, Ore, etc.)**  
Erdie Perforating Co., Rochester, N. Y.  
Gründler Crusher & Pulverizer Co., St. Louis, Mo.  
Harrington & King Perftg. Co., Chicago, Ill.  
Mundt & Sons, Charles, Jersey City, N. J.
- SCREW-Machine Products.**  
Progressive Mfg. Co., Torrington, Conn.



**SEAWALLS.**  
Shore-Line Builders, Inc., Jacksonville, Fla.

**SEWAGE Disposal Systems.**  
D-N Corporation, New York, N. Y.

—**Pipe (Vitrified.)**  
Lee Clay Products Co., Clearfield, Ky.  
Owensboro Sewer Pipe Co., Owensboro, Ky.

**SEWER Pipe Machinery.**  
Quinn Wire & Iron Works, Boone, Iowa.

**SHAFTING Material (Tubular.)**  
National Tube Co., Pittsburgh, Pa.

**SHARPENING Stones.**  
Carborundum Co., Niagara Falls, N. Y.

**SHEET Steel and Iron.**  
American Sheet and Tin Plate Co., Pittsburgh, Pa.  
Bethlehem Steel Co., Bethlehem, Pa.  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.  
Youngstown Sheet & Tube Co., Youngstown, O.

—**Metal Working Machinery.**  
Bertsch & Co., Cambridge City, Ind.

**SHEETS (Asbestos.)**  
Ruberoid Co., New York City.

—**(Galvanized and Black.)**  
American Sheet & Tin Plate Co., Pittsburgh, Pa.

**SHINGLES (Asbestos.)**  
Ruberoid Co., New York City.

**SHIPBUILDING.**  
Charleston Dry Dock & Machine Co., Charleston, S. C.

**SHOVELS (Steam, Gas and Electric Power.)**  
Austin-Western Road Machinery Co., Chicago, Ill.  
Northwest Engineering Co., Chicago, Ill.  
Ohio Power Shovel Co., Lima, Ohio.

**SILICATE OF SODA.**  
Grasselli Chemical Co., Inc., Birmingham.

**SITES (Manufacturing.)**  
Associated Gas & Elec. System, New York, N. Y.  
Crisp County Power Co., Cordova, Ga.  
Galveston, Texas, City of.  
Industrial Commission, Winston-Salem, N. C.  
Model Land Company (Flagler System), St. Augustine, Fla.

**SLINGS (Wire Rope.)**  
American Steel & Wire Co., Chicago, Ill.

**SPEED REDUCERS.**  
Earle Gear & Mach. Co., Phila., Pa.

**SPIKES (Railroad, Ship.)**  
Bethlehem Steel Co., Bethlehem, Pa.  
Sweet's Steel Co., Williamsport, Pa.

**SPRINGS (Machinery, Railway, Spiral Steel.)**  
American Steel & Wire Co., Balto., Md.

—**(Wire—All Kinds.)**  
American Steel & Wire Co., Balto., Md.

**SPRINKLERS (Automatic Fire.)**  
Moore Pipe & Sprinkler Co., Jacksonville, Fla.

**STACKS (Iron and Steel.)**  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.  
Hedges Walsh Weldner Co., Chattanooga.  
Virginia Bridge & Iron Co., Roanoke, Va.

**STAINS (Shingle, Woodwork.)**  
Cabot, Inc., Samuel, Boston, Mass.

**STAIR TREADS.**  
Central Iron & Steel Co., Harrisburg, Pa.

**STANDPIPES.**  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.

**STATIONERS (Envelopes, Letter and Billheads, etc.)**  
Smith & Son Co., Oscar T., Balto., Md.  
Young & Selden Co., Baltimore, Md.

**STEAM (Specialties.)**  
Lunkheimer Co., The, Cincinnati, O.

**STEEL.**  
Bethlehem Steel Co., Bethlehem, Pa.  
Central Iron & Steel Co., Harrisburg, Pa.  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.  
Virginia Bridge & Iron Co., Roanoke, Va.

—**(Cold Rolled.)**  
American Steel & Wire Co., Balto., Md.

—**(Fabricators.)**  
United Welding Co., Middletown, O.

—**(Tool, High Speed.)**  
Bethlehem Steel Co., Bethlehem, Pa.

**STEEL Buildings (Designers and Builders.)**  
American Bridge Co., Pittsburgh, Pa.  
Belmont Iron Works, Philadelphia, Pa.  
Carolina Steel & Iron Co., Greensboro, N. C.  
McClintic-Marshall Corp., Bethlehem, Pa.  
Virginia Bridge & Iron Co., Roanoke, Va.

—**Plate Construction (Riveted or Welded.)**

Bristol Steel & Iron Works, Inc., Bristol, Va.  
Carolina Steel & Iron Co., Greensboro, N. C.  
Central Iron & Steel Co., Harrisburg, Pa.  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.  
Hedges Walsh Weldner Co., Chattanooga.  
McClintic-Marshall Corp., Bethlehem, Pa.  
United Welding Co., Middletown, O.

**STOKERS (Mechanical.)**  
Detroit Stoker Company, Detroit, Mich.

**STRUCTURAL STEEL AND IRON.**

American Bridge Co., Pittsburgh, Pa.  
Austin Bros. Bridge Co., Atlanta, Ga.  
Belmont Iron Works, Philadelphia, Pa.  
Bristol Steel & Iron Works, Inc., Bristol, Va.  
Carrigle Steel Co., Pittsburgh, Pa.  
Carolina Steel & Iron Co., Greensboro, N. C.  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Roanoke Iron & Bridge Works, Inc., Roanoke, Va.  
Snead Architectural Iron Works, Louisville, Ky.  
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.  
Virginia Bridge & Iron Co., Roanoke, Va.

**SULPHATE OF ALUMINA.**  
Grasselli Chemical Co., Inc., Birmingham.

**SULPHIDE OF SODA.**  
Grasselli Chemical Co., Inc., Birmingham.

**SULPHURIC ACID.**  
Du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.

**SURFACING (Roads and Streets)**  
Culbert & Sons, W. F., Marion, Va.

**SURVEYS (Quantity.)**  
Spring, Charles Herbert, Greensboro, N. C.

**SURVEYING INSTRUMENTS.**  
Weber Co., Inc., F., Philadelphia, Pa.

**SWINGING ENGINES.**  
Dake Engine Co., Grand Haven, Mich.

**SWITCHBOARDS, SWITCHES, ETC.**  
General Electric Co., Schenectady, N. Y.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

**TANKS (Air Compressor.)**  
Titusville Iron Works Co., Titusville, Pa.

—**(Elevated Steel.)**  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.  
Cole Mfg. Co., R. D., Newnan, Ga.  
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.  
Virginia Bridge & Iron Co., Roanoke, Va.

—**(Elevated Wood.)**  
Davis & Son, G. M., Palatka, Fla.

—**(Iron and Steel.)**  
American Bridge Co., Pittsburgh, Pa.  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.  
Cole Mfg. Co., R. D., Newnan, Ga.  
Finnigan Co., Inc., J. J., Atlanta, Ga.  
McClintic-Marshall Corp., Bethlehem, Pa.  
Titusville Iron Works Co., Titusville, Pa.  
Virginia Bridge & Iron Co., Roanoke, Va.  
Westinghouse Traction Brake Co., Wilmerding, Pa.

—**(Seamless Steel.)**  
National Tube Co., Pittsburgh, Pa.

—**(Storage, Oil, etc.)**  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Chicago Bridge & Iron Wks., Birmingham.  
Titusville Iron Works Co., Titusville, Pa.  
United Welding Co., Middletown, O.

—**(Wood.)**  
Davis & Son, G. M., Palatka, Fla.  
Virginia Mchry. & Well Co., Richmond, Va.

**TARPAULINS.**  
Atlanta Tent & Awning Co., East Point, Ga.  
Fulton Bag & Cotton Mills, Atlanta, Ga.

**TELEPHONE SERVICE.**  
American Telephone & Telegraph Co.

**TENTS.**  
Fulton Bag & Cotton Mills, Atlanta, Ga.

**TEXTILE CHEMICALS.**  
Grasselli Chemical Co., Inc., Birmingham.

**TILE (Floor.)**  
Hood Co., B. Mifflin, Daisy, Tenn.

—**(Roof.)**  
Hood Co., B. Mifflin, Daisy, Tenn.

—**(Sewer.)**  
Lee Clay Products Co., Clearfield, Ky.

**TIN AND TERNE PLATES.**  
American Sheet & Tin Plate Co., Pittsburgh, Pa.  
Bethlehem Steel Co., Bethlehem, Pa.

**TOOLS and DIES.**  
Gerding Bros., Cincinnati, O.

**TOWERS (Electric Transmis- sion.)**  
American Bridge Co., Pittsburgh, Pa.

—**(Steel and Wood.)**  
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
Cole Mfg. Co., R. D., Newnan, Ga.

**TRACK (Portable or Permanent.)**  
Equipment Corp. of America, Chicago, Ill.  
Sweet's Steel Co., Williamsport, Pa.

**TRACTORS (Industrial.)**  
Caterpillar Tractor Co., Peoria, Ill.  
International Harvester Co. of America, Inc., Chicago, Ill.

—**(Road.)**  
Caterpillar Tractor Co., Peoria, Ill.

**TRAILERS (Arch-Girder, Heavy Duty.)**  
Wellman Engr. Co., Cleveland, O.

**TRAMRAIL SYSTEMS (Hand or Electric.)**  
Cleveland Crane & Engr. Co., Wickliffe, O.

**TRAMWAYS (Aerial Wire Rope.)**  
American Steel & Wire Co., Balto., Md.

**TRANSFORMERS.**  
General Electric Co., Schenectady, N. Y.

—**(Used.)**  
Electric Service Co., Cincinnati, O.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

**TRANSMISSION TOWERS**  
**(Galvanized.)**  
McClintic-Marshall Corp., Bethlehem, Pa.

**TRENCH MACHINERY. See**  
**Excavators (Trench.)**

**TRI-SODIUM PHOSPHATE.**  
Grasselli Chemical Co., Inc., Birmingham.

**TRUCKS (Motor.)**  
International Harvester Co. of America, Inc., Chicago, Ill.

**TUBES (Boiler.) See**  
**Boiler Tubes.**

**TUBING (Seamless Steel.)**  
National Tube Co., Pittsburgh, Pa.

**TURBINES (Steam.)**  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
DeLaval Steam Turbine Co., Trenton, N. J.  
General Electric Co., Schenectady, N. Y.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

**TURNTABLES.**  
American Bridge Co., Pittsburgh, Pa.  
Virginia Bridge & Iron Co., Roanoke, Va.

**UNIONS.**  
Dart Mfg. Co., E. M., Providence, R. I.

**VALVES.**  
Lunkheimer Co., The, Cincinnati, O.  
Westinghouse Traction Brake Co., Wilmerding, Pa.

—**(Acid Proof.)**  
Lunkheimer Co., The, Cincinnati, Ohio.

—**(Gate.)**  
Lunkheimer Co., The, Cincinnati, Ohio.

**VAULTS (Bank and Safe Deposit.)**  
York Safe & Lock Co., York, Penna.

**WAGONS (Crawlers.)**  
Austin-Western Road Mchry. Co., Chicago, Ill.

**WARDROBES (Hygienic, School.)**  
Wilson Corp., The J. G., New York.

**WATER HEATERS.**  
Finnigan Co., Inc., J. J., Atlanta, Ga.

**WATER Purification.**  
Bacharach & Co., E. W., Kansas City.  
International Filter Co., Chicago, Ill.  
Roberts Filter Mfg. Co., Darby (Phila.) Pa.

—**Softening Apparatus (Purify- ing.)**  
American Water Softener Co., Phila., Pa.  
International Filter Co., Chicago, Ill.

—**Works Supplies and Appli- cations.**  
Cast Iron Pipe Research Asso., Chicago.  
Glamorgan Pipe & Fdry. Co., Lynchburg, Va.  
Layne & Bowler, Inc., Memphis, Tenn.

**WELDING.**  
Charleston Dry Dock & Machine Co., Charleston, S. C.  
Hedges-Walsh-Weldner Co., Chattanooga.  
United Welding Co., Middletown, O.

**WELDING APPARATUS (Elec- tric Arc.)**  
General Electric Co., Schenectady, N. Y.  
Layne & Bowler, Inc., Memphis, Tenn.  
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

**WELL CONTRACTORS (Oil, Artesian, etc.)**  
Layne & Bowler, Memphis Tenn.  
Virginia Mchry. & Well Co., Richmond, Va.

**WHEELS AND AXLES.**  
Carnegie Steel Co., Pittsburgh, Pa.

**WINDOW WASHING EQUIP- MENT (Tramrail.)**  
Cleveland Crane & Engr. Co., Wickliffe, O.

**WIRE (All Kinds.)**  
American Steel & Wire Co., Chicago.  
Seneca Wire & Mfg. Co., Fostoria, O.

—**(Barbed Wire, etc.)**  
American Steel & Wire Co., Balto., Md.

—**(Fence.)**  
Cyclone Fence Co., Waukegan, Ill.  
Stewart Iron Works Co., Cincinnati, O.

—**(Flat and Round.)**  
American Steel & Wire Co., Balto., Md.

**WIRE Cloth (Iron, Steel, Copper, Brass, etc.)**  
Harrington & King Perf. Co., Chicago.  
Seneca Wire & Mfg. Co., Fostoria, O.

—**Goods.**  
Cyclone Fence Co., Waukegan, Ill.

—**Rope (Transmission, Hoist- ing, Haulage.)**  
American Cable Co., New York City.  
American Steel & Wire Co., Chicago, Ill.  
Hazard Wire Rope Co., Wilkes-Barre, Pa.

—**Rope Clips.**  
American Steel & Wire Co., Balto., Md.

—**Stapling.**  
Seneca Wire & Mfg. Co., Fostoria, O.

—**(Telephone and Telegraph.)**  
American Steel & Wire Co., Balto., Md.

—**(Welding.)**  
American Steel & Wire Co., Chicago, Ill.  
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**WOOD TURNING (Columns, etc.)**  
Schwerdt Mfg. Co., A. F., Pittsburgh.

**WOODWORK (Cabinet.)**  
Mitchell Mfg. Co., Robert, Cincinnati, O.

**ZINC CHLORIDE.**  
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